Motivational Interviewing for Enhancing Engagement in Intimate Partner Violence Intervention

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ABSTRACT

The outcome of treatment for Intimate Partner Violence (IPV) is hampered by high rates of nonattendance and drop-out, low motivation or readiness to change, problems in the establishment of a therapeutic alliance, and limited engagement in treatment activities such as homework assignments. As a brief pre-treatment intervention, Motivational Interviewing (MI) has the potential to improve intervention engagement, particularly for individuals with lower motivation levels. Furthermore, MI may be particularly well suited for those mandated to attend IPV intervention programmes and those who may not yet be committed to active personal change. Previous research on MI as preparation for IPV intervention programmes has reported mixed results. Further research is required to address the limitations in past research, including measurement of and reporting data on the fidelity of the MI. Furthermore, research needs to make the distinction between MI for IPV intervention engagement and MI for IPV behaviour change. The current thesis encompasses three studies. The first study was an audit that provided information on IPV intervention commencement and completion rate at Aviva Family Violence Services (Aviva for short) and Stopping Violence Services (SVS) two of the main providers of stopping programmes in the Christchurch city of New Zealand (NZ). Additionally, this study evaluated what (if any) client characteristics predict IPV intervention commencement and completion at these agencies. The second study was an educational study that was conducted to analyse the effectiveness of MI training in developing MI skills of practitioners at Aviva and SVS. The other aim was for these practitioners to receive training in MI in preparation for the final study (Study 3). Study 3 was a quasi-experimental study that investigated the effectiveness of MI as a pre-intervention method for increasing engagement of male perpetrators in IPV programmes.

The key findings from the audit Study (Study 1) were that the rate of intervention commencement at Aviva and SVS was 84.6% and 89.2% respectively. Further, it was found that the intervention commencement rate at SVS was significantly predicted by their type of referrals, suggesting that mandated clients were more likely to commence intervention. Also, IPV intervention completion was found to be lower at Aviva (46.2%) compared to SVS (82.1%).

The second study found that the MI training (2-day workshop plus post-workshop feedback and coaching) produced measurable gains in the MI skills of practitioners working in IPV. Practitioners who attended the workshop training demonstrated an increase in MI skills immediately after finishing the workshop based on the results of the Video Assessment of Simulated Encounters Revised NZ version (VASE-R NZ). The average full score on the VASE-R NZ significantly increased pre-training (19.14%) to post-training (27.14%). Also, all the practitioners demonstrated at least a fair level of proficiency on the reflection-to-question ratio and the percent complex reflections based on Motivational Interviewing Treatment Integrity ratings of audio samples of their MI conversations with IPV clients. Further, 75% (3 out of 4) of them achieved at least a fair level of proficiency in their technical and relational skills.

In the outcome study (Study 3), the within-group analysis found a statistically significant result for the Readiness Ruler from pre- to post-MI (time 1 to time 2), which was associated with a large effect size ($p = 0.025$, $r = 0.64$). With regards to the other primary outcomes, the results showed that the MI participants attended a significantly higher number of IPV program sessions (mean = 12.18) compared to the control participants (mean = 7) and, also completed the intervention (60%) at a higher rate than the control condition (40%). The last finding, however, was not statistically significant. Regarding the secondary outcomes, no clinically reliable changes existed between MI and control participants from time 1 to time 2 regarding the Change

Questionnaire items (importance, ability, and commitment), and no discernible differences were found between MI and control groups. Taken together, the current thesis contributes to the knowledge in this area by addressing gaps in the literature, by evaluating MI as a pre-treatment intervention for increasing engagement, and including a fidelity measure. It appears that MI for engagement is appropriate for improving perpetrators' engagement in IPV programmes. Further research, however, is required to generalise the findings to the IPV context.

Keywords: Motivational interviewing, domestic violence, male perpetrators, engagement

CHAPTER 1: INTRODUCTION

Chapter Overview

This chapter will:

- Provide a brief outline of the thesis and the content of each chapter
- Describe Intimate Partner Violence (IPV) and its consequences
- Report data on the rate of IPV in New Zealand (NZ) and internationally
- Provide an overview of IPV intervention approaches and research on the efficacy of IPV Programmes

Overview of the Study

This thesis presents a clinical trial of Motivational Interviewing (MI) as a pre-treatment intervention for engaging male perpetrators of IPV in Intimate Partner Violence (IPV) intervention. Chapter 1 provides a general description of IPV. Further, it reviews the literature related to different approaches for IPV intervention and efficacy and introduces MI as having a potential role in IPV intervention. Chapter 2 describes MI as an intervention for behaviour change in general and expands on how MI may be relevant to IPV. Then it reviews studies that have evaluated MI for increasing engagement in the IPV programme. Chapter 3 describes Aviva Family Violence Services (Aviva for short) and Stopping Violence Services (SVS), agencies where the current study took place. Chapter 4 outlines the first study, which was an audit study analysing and assessing what was currently happening at Aviva and SVS in terms of IPV intervention engagement. The engagement was measured by intervention commencement and completion rates. Chapter 5 comprises the training study, in which staff at SVS and Aviva were trained in MI to enable them to implement MI in the outcome study (Chapter 6). The outcome study evaluated MI for enhancing engagement provided by Aviva and SVS staff trained in MI. Chapter 7 comprises a discussion of the overall findings, including the utility of MI for engagement and generalisability of the results to other settings, as well as the practicality of using MI in practice. The thesis ends with a discussion of the strengths and weaknesses of the studies in this research, and suggestions for future literature.

Approval for the research was granted by the Health and Disability Ethics Committees (HDEC, 08 June 2017), the University of Canterbury Human Ethics Committee (HEC, 18 July 2017), and the University of Canterbury Maori Research Advisory Group (23 June 2017).The current study also had the support of Aviva's CEO and SVS's manager in consultation with

relevant staff at both agencies. Appendix A contains the agreement letter between Aviva and SVS and the University of Canterbury, and approval letters from HDEC, HEC, and Maori Research Advisory Group.

Intimate Partner Violence (IPV)

Violence between intimate partners was first recognised in the literature as an issue in the mid-1970s (Kelly and Johnson 2008). The knowledge regarding this psychological, social, and legal problem was limited at that time (Kelly and Johnson 2008). Intimate partner violence used to be considered a private matter until the Violence Against Women Act was passed in the US, in 1994, and IPV has been acknowledged as an essential social issue since then (Collins 2016). The violence against women Act is recognised as the Domestic Violence Act in New Zealand (NZ), which was passed in 1995.

The law and many social scientists consider IPV as any violence by one partner against the other, and it occurs when one partner attempts to physically or psychologically dominate and control the other (Kelly and Johnson 2008, Healey 2014). Terminology in the IPV field is varied, and different terms are used to describe it, such as battering, domestic violence, interpersonal violence, family violence, and domestic or spousal abuse. In this thesis, IPV is used to describe the violence inside the family perpetrated by one partner on the other. Additionally, the term "perpetrator" is used to describe persons who apply violent behaviour to control their partners, and finally, the term "victim" defines those who are being victimised by their partners. Partners in IPV can be married, separated, and divorced, cohabiting, dating, or be in a same-sex relationship (Raghavan and Cohen 2013, Healey 2014). The focus of this thesis is IPV in heterosexual relationships perpetrated by men.

Intimate partner violence can have different forms (Mitchell 2011), including:

Emotional abuse. Blaming the victim for all problems in the relationship, undermining the victim's self-esteem and self-worth through comparisons with others, withdrawing interest and engagement, and emotional blackmail.

Verbal abuse. Swearing and humiliation in private and public, focusing on intelligence, sexuality, body image, or the victim's capacity as a parent or spouse.

Social abuse. Systematic isolation from family and friends, instigating and controlling relocations to a place where the victim has no social circle or employment opportunities and preventing the victim from going out to meet people.

Economic abuse. Controlling all money, forbidding access to bank accounts, providing an inadequate 'allowance,' preventing the victim from seeking or holding employment, and taking wages earned by the victim.

Psychological abuse. Making threats regarding custody of children, asserting the justice system will not believe or support the victim, destroying property, abusing pets, and driving dangerously.

Spiritual abuse. Denial and misuse of religious beliefs or practices to force victims into secondary roles, and misusing religious or spiritual traditions to justify physical violence or other abuse.

Physical abuse. Direct assaults on the body, use of weapons (including objects), assault of children, locking the victim out of the house, sleep and food deprivation.

Sexual abuse. Any form of pressured/unwanted sex or sexual degradation, causing pain during sex, coercive sex without protection against pregnancy or sexually transmitted disease, making the victim perform sexual acts unwillingly and criticising or using degrading insults.

Research into IPV developed in the 1970s, with the information coming from shelters, hospital, and police data (Kelly and Johnson 2008). Gondlof (1988) developed one of the earliest typologies of IPV perpetrators. He identified this typology based on the interviews he conducted with 6000 female victims recruited from shelters. He suggested that perpetrators can be organised into two categories:

Typical perpetrator. The violence is less severe compared to the other kinds, and the perpetrator is less likely to have significant mental health problems. The violence is mostly confined inside the house, no record of police arrest exists, and the perpetrators are more likely to be regretful after an incident of violence (Gondolf 1988).

Antisocial perpetrator. These perpetrators are generally violent and abuse their victims in and outside the house. They have mental health problems and may have substance abuse disorders as well. In most cases, a history of arrest due to applying violence exists (Gondolf 1988).

From a review of 15 IPV perpetrators, the following four types of IPV based on the severity and frequency of the violence, the generality of the violence (Violence occurred inside or outside of the relationship), and characteristics of the perpetrators suggested by Holtzworth-Munroe and Stuart (1994):

Family-only perpetrator. This type of violence usually occurs at home and is accompanied by regret. Minor sexual and psychological abuse usually accompanies this type of violence.

Dysphoric or borderline perpetrator. This type of violence is confined to home; however, it is a more severe kind of abuse compared to the family-only perpetrator. These perpetrators have mental health problems and may have Borderline Personality Disorder (BPD). Borderline personality disorder is a disorder characterised by disturbances in emotional regulation,

impulse control, interpersonal relationship, and identity. Specific features of BPD include: extreme effort to avoid real or imagined abandonment, unstable and intense interpersonal relationships, identity disturbance, disturbed, distorted, or unbalanced self-image or sense of self, impulsivity that is potentially self-damaging, recurrent suicidal behaviour, chronic feelings of emptiness, and inappropriate, intense anger, or lack of control of anger (Riggenbach 2016). Additionally, perpetrators who are dysphoric or have BPD are jealous, dependent, and have a fear of losing their partners.

Generally violent antisocial perpetrator. They engage in violence outside of the family and have an antisocial personality disorder. People with antisocial personality disorder violate social norms, laws, and other people. They have little to no empathy, they lack remorse for any of these violations, and they can be violent (Riggenbach 2016).

Sociopathic perpetrator. They use a high level of violence inside and outside of the house, may have a shared history of arrests because of violence, and low remorse and little empathy for others. They are also likely to have significant substance abuse disorders.

Gottman, Jacobson, Rushe, and Shortt (1995) described IPV perpetrators based on perpetrators' physiology. They suggested that two types of IPV perpetrators exist. In type 1, the perpetrators like to control their partners, and their heart rate is low during arguments. In type 2, the perpetrators use violence because they fear that they might lose their control over their partners either emotionally or physically, and their heart rate tends to increase during the violence.

Kelly and Johnson (2008) described four types of IPV:

Coercive controlling violence. Johnson (2006) indicated that coercive controlling violence comprises 97% of cases of IPV. This type of violence, although not always physical, is more frequent and severe compared to the other kinds of abuse. Kelly and Johnson (2008) indicated

that the rate and severity of injuries resulting from coercive controlling violence is high. It also involves emotional abuse, coercion, and control. In one early typology, the coercive controlling violence was recognised as intimate terrorism (Johnson 1995).

Violent resistance. Violent resistance is a type of violence that aims to control the coercive behaviour of the partner. This type of abuse can be enacted by both men and women who try to defend themselves, but women are more likely to use it in an attempt to protect themselves against their abusive partners (Kelly and Johnson 2008). This type of violence can be dangerous. For many of these women, the most severe incidents take place when they threaten or try to leave their partners. Another major factor is that these women feel that they can no longer survive in this relationship and that safely leaving is also impossible.

Situational couple violence. Situational couple violence is the most common type of IPV and is a type of abuse that does not necessarily happen in the context of control and power, but it happens when partners are unable to resolve their conflicts, have poor skills to control their anger, and lack the required coping mechanism skills. It is a type of violence that has different reasons and usually involves pushing, shoving, and grabbing. In contrast to the women in a coercive controlling relationship, women experiencing situational couple violence might not be fearful of their partner. Verbally aggressive behaviour usually happens in this type of violence. Verbally aggressive behaviour is similar to the emotional abuse in coercive controlling violence, but the violence here is not accompanied with power, control, or intimidation (Leone, Johnson et al. 2004).

Separation-instigated violence. Separation-instigated violence happens at the time of or after separation (Johnston and Campbell 1993). There is no history of violence, and partners report no intimidation, coercion, or control (Kelly and Johnson 2008). The problem here is that psychological control is lost, and this usually happens at the beginning of the separation.

Separation-instigated violence can include incidents like throwing objects at the partner, throwing clothes into the street, or damaging the partner's car.

Despite disagreement between researchers regarding these typologies (Emery 2011, Brasfield 2015), it is believed that the ability to identify different kinds of perpetrators might help to identify perpetrators' particular risk and needs better, and as a result assessment and intervention will be conducted more effectively (Devaney and Lazenbatt 2016). Many current intervention programmes for IPV perpetrators are standardised and uniformly applied to all of them seeking help; however, one intervention may be better suited for one subtype of perpetrator than for another. Tailoring interventions to meet the needs of each subtype of perpetrators might improve the IPV programme efficacy (Gondolf 1988, Saunders 1992).

Research has tested the validity of these different typologies (Huss and Ralston 2008, Graña, Redondo et al. 2014, Cameranesi 2016). There is consistency in research regarding different types of violence. However, while some researchers have found that different typologies could be fitted within the community samples, other researchers could not replicate these findings (Cameranesi 2016). Generally, research suggests that family-only perpetrators are more likely to complete treatment, and less likely to recidivate than their generally violent counterparts (Stoops, Bennett et al. 2010, Cantos, Goldstein et al. 2015, Goldstein, Cantos et al. 2016). Therefore, assessing perpetrator's typologies when assigning them to IPV programmes is recommended by these researchers. Additionally, identifying these typologies would help to determine underlying processes that contribute to IPV, together with causes and consequences. Also, this would help to inform practitioners regarding potential risk characteristics, aiding the process of risk assessment. Moreover, a classification system would help intervention evaluation and encourage the development of best practice for IPV programmes that would be more effective in preventing

future victimisation. Finally, the capacity of police, social service, and health sectors to deal with IPV can be improved by tailoring interventions towards specific types of perpetrators (Graña, Redondo et al. 2014).

The Cycle of Violence

Walker (2014) suggested three different phases that may occur in an abusive relationship. These phases are the tension-building phase, the acute battering phase, and the honeymoon phase. During the tension building phase, minor incidents of physical violence and significant amounts of emotional abuse can happen. In the second phase, severe forms of physical violence can occur, which can last from a couple of minutes to extreme cases of several weeks. In the honeymoon phase, the perpetrator is usually regretful and tries to convince the victim that violence would not happen again. At this stage, the perpetrators decide to change some of their behaviours. For example, they might go to counselling sessions or start reading a self-help book. However, this phase usually does not last long, and the abusive partner repeats his behaviour. Although this description is useful, it does not necessarily apply to all situations of IPV.

Power and Control Wheel

The Power and Control wheel was developed in the 1980s based on women's reports of the most common ways they were being abused by their partners (Pence and Paymar 1986). Based on this description, IPV is not considered a psychological problem or mental illness; however, it is identified as a behaviour in which a perpetrator aims to control his partner. In this model, the wheel consists of eight sections, including using intimidation (e.g., making the partner afraid by using looks, actions, gestures); emotional abuse (e.g., making the partner thinks she's crazy); isolation (e.g., controlling what the partner does, who she sees and talks to, what she read, where she goes); minimising (e.g., making light of the abuse); denying and blaming, using children (e.g.,

making the partner feel guilty about her children); using male privilege (e.g., acting like the 'master of the castle'); economic abuse (e.g., putting the partner on an allowance); and using coercion and threats (e.g., making and/or carrying out threats to do something to hurt the partner). The wheel has an outer side describing physical and sexual violence (Figure 1). The Power and Control wheel is used widely in IPV programmes internationally and is also the most commonly used model of violence in IPV programmes in NZ (Rankine, Percival et al. 2017). The effectiveness of this wheel, which is part of the Duluth model in IPV programmes, is discussed below.

Figure 1. Power and Control Wheel

Adapted from (Pence and Paymer 1993)

Risk Factors for IPV

Understanding risk factors for IPV is critical, as they can inform prevention approaches and the development of appropriate interventions (Holtzworth-Munroe and Meehan 2004). The aetiology of IPV and other violent behaviours is similar (Aaltonen, Kivivuori et al. 2012). Likewise, Capaldi, Knoble, Shortt, and Kim (2012) indicated that risk factors for IPV were similar to risk factors for other risky behaviours in adolescence and adulthood, such as crime, substance use, and sexual risk behaviours. A NZ study of the similarities between general crime and IPV found that general violence and IPV were related but they did not necessarily share the same risk factors. Negative emotionality predicted both general violence and IPV, whereas weak self-control predicted only general violence but not IPV (Moffitt, Krueger et al. 2000).

The most widely used model for understanding violence is the ecological model, and it aims to understand the multifaceted nature of violence, and to understand why a person becomes a victim or a perpetrator (Krug, Dahlberg et al. 2002). This model has four levels:

Individual factors. Young age, low level of education and income, witnessing violence as a child, harmful use of alcohol and drugs, personality disorders, and history of abusing partners are accompanied with both victimisation and perpetration. As well as these factors, the experience of sexual abuse during childhood is a risk factor for women becoming a victim later in their intimate relationships.

Relationship factors. A person's closest social circle like peers, partners, and family members, influence their behaviours and contribute to their range of experiences.

Community and societal factors. Risk at this level may be influenced by factors such as population density and high levels of unemployment.

Social factors. At this level, factors that create an environment for perpetrating violence are considered. These factors are the availability of weapons and social and cultural norms. Social and cultural norms are related to parental rights over children, conceptualising suicide as an individual factor rather than a problem that could be prevented, and those norms in a society that consider men as a dominant gender over women and children.

In a review study, Flynn and Graham (2010) categorised the risk factors of IPV into three groups. These comprise the backgrounds and personal attributes of perpetrator or victim (e.g., longstanding mental health problems, past experiences with abuse); current lifestyle behaviours (e.g., alcohol and drug use tendencies); and immediate precursors (e.g., provocative acts by partner). Further, across diverse cultures, drinking at the time of IPV is found to be associated with more severe forms of IPV (Graham, S. et al. 2011).

Warning signs of potential IPV have also been identified. The perpetrator can be very clingy, continually wanting to call his partner, excessively questioning her partners' actions and whereabouts, and randomly showing up at places of work or school. The perpetrator might also surprise his partner in a way that feels like stalking and insists that things should be done his way. A short temper, wanting to have sex for the wrong reasons, threats to commit suicide if the partner leaves, and increased use of drugs and alcohol might also be present in a perpetrator. Finally, teaching the partner to respect him, wanting the partner to fear him, and blaming the partner for things out of her control are among the other characteristics of a perpetrator (Finley 2016)).

Other identified risk factors for IPV are depression, low self-esteem, low household income, unemployment, minority group membership, and stress (Rennison and Welchans 2000, Finley 2016, Brem, Florimbio et al. 2017). Moreover, relationship status (e.g., married, cohabiting, separated) is related to IPV, with married individuals being at the lowest risk and recently separated

women being particularly vulnerable (Capaldi, Knoble et al. 2012). Also, low relationship satisfaction and high conflict are robust predictors of IPV (Capaldi, Knoble et al. 2012).

Exposure to violence between parents in the family of origin and experience of child abuse are among the most researched risk factors (Capaldi, Knoble et al. 2012). However, much of the evidence is based on the retrospective reporting, and research has suggested that other factors, such as an individual's antisocial behaviour and adult adjustment, may mediate this association (Capaldi, Knoble et al. 2012). One of the most critical predictors of the perpetration of IPV, however, is a history of violence against women. Those who have used violence against their partners are 13 times more likely to perpetrate again in the future (Finley 2016).

One longitudinal study conducted in NZ to identify risk factors for IPV (Moffitt and Caspi 1999) found that low educational achievement of male perpetrators during adolescence predicted future IPV. The study did not mention any reason as to why poor school achievement can result in IPV in adulthood. Other predictors were histories of violent and aggressive behaviour and previous arrest for other crimes.

Apart from perpetrators, the reason why women, and some women, in particular, are more likely to be exposed to IPV is also a question. Moffitt and Caspi (1999) reported that risk factors for women being victims of IPV included disturbed family relationships, weak attachment, harsh discipline, and conflict between parents. Poverty and school failure were less critical factors in predicting IPV. Often the risk factors for being a perpetrator and a victim overlap with each other, and perpetrators and victims share similar characteristics (Jennings, Piquero et al. 2012).

Other studies have found that women with problems of depression, substance abuse disorders, post-traumatic stress disorders, and suicidal thoughts were at higher risk to be a victim in their relationships (Callahan, Tolman et al. 2003, Cavanaugh, Martins et al. 2013). Callahan et

al. (2003) noted that violence in relationships preceded lower psychological well-being and not the reverse. They also mentioned that it was possible that low self-esteem or psychological well-being could increase the victims' vulnerability to experience violence in their relationships. Likewise, Breslau, Davis, Peterson, and Schultz (2000) suggested that depression could increase the risk of traumatic exposure. Additionally, witnessing IPV and child abuse could also lead to low self-esteem or lesser psychological well-being, resulting in an increased vulnerability to victimisation later in an intimate relationship (Breslau, Davis et al. 2000).

Regarding the protective factors, studies have shown that factors such as higher education, employment, economic independence, successful female role model, and absence of patriarchal ideology are all contributing to less vulnerability to and acceptance of IPV (Bazargan-Hejazia, Medeirosc et al. 2013, Schuler, Lenzi et al. 2017).

Consequences of IPV

Intimate partner violence is a common problem with serious social consequences and is accompanied by physical and psychological health impacts (Mitchell 2011, Costa, Kaestle et al. 2015). Studies show that IPV perpetrated by men against women is more likely to be severe and tends to have more negative consequences compared to violence perpetrated by women against men (Holtzworth-Munroe 2005, Ehrensaft 2008). Also, there is more tendency for women to seek services (e.g., police, medical, and counselling) after being abused in their relationship (Johnson 2006). Some of the physical consequences for the female recipient of IPV include gynaecological disorders, injuries, sexually transmitted diseases, and mortality (Kazantzis, Flerr et al. 2000). Other consequences that frequently occur for the recipient of IPV are depression, posttraumatic stress disorders, anxiety, low self-esteem, sleeping disturbances, eating disorders, suicidal behaviour, and increased likelihood of substance abuse (Orava, McLeod et al. 1996, Pico-Alfonso 2005,

Fujiwara, Okuyama et al. 2010, Devries, Mak et al. 2013, Blasco-Ros, Herbert et al. 2014). Women who experience IPV may also develop feelings such as guilt, and they may become socially isolated and emotionally dependent on their abusive partner (Matud 2005). Intimate partner violence can lead to significant adverse health outcomes for both women and men who are victims of IPV, including asthma, activity limitation, joint disease, broken bones, traumatic brain injury, sexual dysfunction, chronic pain syndromes, cardiovascular disease, obesity, gastrointestinal disorders, and sexually transmitted infections (Breiding, Black et al. 2008, Black 2011).

The other significant concern with IPV is the effects on children. Children who are exposed to IPV are at increased risk of developing a range of psychological and behavioural problems such as academic problems, depression, anxiety, substance abuse, and aggression (Ghasemi 2009). A review study by Edleson (1999) found that these children were more likely to show externalised and internalised behaviours like aggression and fear. In addition, exposure to IPV may influence children's attitudes toward the use of violence. Boys who were exposed to IPV had more positive attitudes towards violence when compared to girls who were exposed and boys who were not exposed (Edleson 1999). Also, one of the most consistent predictors of children becoming victims or perpetrators of violence in their relationships is experiencing IPV in their families (Insetta, Akers et al. 2015).

Furthermore, exposure to a parent being verbally or physically assaulted is physiologically and emotionally arousing for children (Holden 2003). Holden (2003) also indicated that observing violence may cause the children to develop feelings of fear, and they may become worried for the safety of themselves and the victim. In addition to getting concerned about their safety, watching a parent being beaten is extremely distressing, and can evoke feelings such as fear and helplessness. Holden also noted that exposure to IPV is not limited to witnessing or overhearing

it. Children who live in homes in which IPV occurs are aware of the abuse and can be affected by it whether or not they witness it directly.

Men as perpetrators also may experience negative consequences. These negative consequences include feeling down, feeling sorry for their partner, being distracted from work, worrying about their partners leaving the relationship or threatening divorce, fear of, or actual loss of employment, and being avoided by their children, friends, and relatives (Walker, Neighbors et al. 2010).

Intimate partner violence is not only an individual or family problem but also a financial and social issue (Ghasemi 2009). In 1994, it was estimated that the economic cost of family violence in NZ was at least $1.2 billion annually, and it had a significant impact on the NZ's health budget (Schimanski and Hedgecock 2009).

The Rate of IPV

A recent meta-analysis of 141 studies from 81 countries showed that the prevalence of IPV among ever-partnered women aged 15 years or over was 30% (Devries, Mak et al. 2013). A WHO multi-country study (Garcia-Moreno, Jansen et al. 2005, García-Moreno, Jansen et al. 2006), which was based on 24,097 interviews with women 15 to 49 years old, from 15 sites in 10 countries (Bangladesh, Brazil, Ethiopia, Japan, Peru, Namibia, Samoa, Serbia , Montenegro, Thailand, and the United Republic of Tanzania), found that the incidence of IPV among women in the world was between 15 and 71%. Another finding of the study was that a large proportion of the IPV was severe, and tended to occur frequently. However, the percentage of the violence that was severe seemed to be higher in more traditional rural settings than in the city settings of Japan, Serbia and Montenegro. A higher level of violence in rural settings suggest that the pattern of abuse is higher

in countries in which women have less power compared to more industrialised countries (Garcia-Moreno, Jansen et al. 2006)

The 2010 National Intimate Partner and Sexual Violence Survey (NISVS) found that about 35.6 % of American women have been the victim of IPV in the form of rape, physical violence, or stalking at some point throughout their lives (Murray, Crowe et al. 2016). Another study indicated that one in four women in the United States had experienced severe IPV (Burge, Katerndahl et al. 2016). Other surveys suggested that more than 95% of abuse perpetrators were men and between 20% and 25% of adult women have been physically abused by a partner (Carter 2007). A NZ study found that 33.1% of women in Auckland had experienced physical and sexual violence by an intimate partner at some point in their lives (Fanslow and Robinson 2004). Also, recent data in NZ showed that one in three women had experienced physical and sexual IPV in their lifetimes (Clearinghouse 2017).

Some studies have also investigated the rate of different types of IPV. In the WHO Study, (Garcia-Moreno, Jansen et al. 2006), it was found that 23-49% of women suffered from physical violence. The range of lifetime prevalence of sexual abuse by an intimate partner was between 10% and 50%. Although sexual violence generally was considerably less frequent than physical violence, it was more prevalent in the Bangladesh province, the Ethiopia province, and Thailand city. Emotional abuse across all other countries ranged between 20% and 75%.

Other research suggests that the rate of verbal abuse is higher compared to other types of violence (Babu and Kar 2009, Ozyurt and Deveci 2010). A NZ study found that psychological and emotional abuse was the most commonly reported type of IPV, and it was common in both women who were exposed to physical and sexual violence and those who were not (Fanslow and Robinson 2011). It has also been found that emotional abuse was more prevalent in countries like Turkey,

Pakistan, and Paraguay, where patriarchal culture was dominated in families, and boys grew up with the idea that men were superior to women, and must control and suppress them in an attempt not to lose their control over them (Alan, Yilmaz et al. 2016). In less male-dominant societies, such as Spain and Norway, emotional violence tended to be lower (Alan, Yilmaz et al. 2016).

In addition to women's experiences, the WHO study (García-Moreno, Jansen et al. 2005, Garcia-Moreno, Jansen et al. 2006), investigated women's attitudes to IPV. Over three-quarters of women in the countries of Brazil, Japan, Namibia, Serbia, and Montenegro believed that no reason justified violence, whereas less than one quarter, thought so in the rural settings of Bangladesh, Ethiopia, and Peru. Further, those women, who had experienced abuse in their relationship, had a more accepting attitude towards violence compared to the women who had not been abused.

Intervention Programmes for IPV

Given the adverse effects of IPV on the individuals, their family and the community, IPV intervention is an urgent public health priority, and a variety of programmes have been applied in the last three decades to help perpetrators stop their IPV behaviour (Neighbors, Walker et al. 2010, Marisol, Amparo et al. 2014). While there is variation in the type of intervention and methods used, most programmes share the same goals of reducing the level of IPV and promoting victim safety (Eckhardt, Murphy et al. 2013).

Two main intervention models exist (Arias, Arce et al. 2013), the Duluth Model and Cognitive-Behavioural Therapy (CBT). The former combines a gender (feminist) approach with a psycho-educational perspective and emphasises that male IPV is used almost solely as a form of power and control (Feder and Wilson 2005, Corvo, Dutton et al. 2009). On the other hand, CBT programmes view IPV as a learnt behaviour, which is best treated by training social skills and anger management (Arias, Arce et al. 2013).

Efficacy of IPV Intervention

There are now plenty of studies, including meta-analyses and numerous commentaries on the field of research (e.g., (Babcock, Green et al. 2004, Gondolf 2004, Feder and Wilson 2005). As a whole, these studies offer only modest support for the role of IPV intervention in helping men end abusive behaviours (Arias, Arce et al. 2013).

One meta-analysis (N=20 studies) revealed that although programmes based on CBT and the Duluth Model reduced violent behaviour, the reduction was not statistically significant (Arias, Arce et al. 2013). In their meta-analysis (N=22 studies), Babcock et al. (2004) concluded that the effect size for group IPV intervention on recidivism of IPV was small. They also noted that the Duluth model had minimal impact on reducing recidivism. Additionally, they found that CBT and the Duluth treatment model showed no evidence of effectiveness relative to a no-intervention control.

Also, in a study conducted by Herman, Rotunda, Williamson, and Vodanovich (2014), changes in the beliefs and behaviour of 156 perpetrators who participated in a Duluth model programme were examined. One hundred and three perpetrators completed the programme versus 53 who did not. The results showed that the percentage of recidivists (nine years after the intervention) among completers and non-completers of the programme were 39.0% and 37.7%, respectively, and the difference was not statistically significant.

Many studies have examined the effectiveness of CBT with IPV, but no published research demonstrated the efficacy of CBT for IPV in terms of reduced violence or any meaningful outcome, and research suggests that these programmes have not been particularly effective at preventing recidivism, are prone to attrition, and increasingly lack the support and confidence of the courts (Lehmann and Simmons 2009, Hamilton, Koehler et al. 2013, Aaron and Beaulaurier

2017, Ferrer-Perez and Bosch-Fiol 2018). When considering IPV effectiveness, the other crucial issue is the high rate of dropout, which is reported to be between 40% and 90% (Loinaz and Echeburúa 2010, Ferrer-Perez and Bosch-Fiol 2018). Additionally, many studies examining the effects of CBT reported improvement in the attitudes and beliefs towards women of men completing the programmes and nothing more (Craig, Robyak et al. 2006, Schmidt, Kolodinsky et al. 2007).

While most of the studies that have evaluated IPV intervention have found mixed findings or small effects, it is difficult to compare across studies either because of differences in the research methodology used to assess these programmes or differences in outcome measures, the follow up time, and the type of programmes utilised (Feder, Wilson et al. 2008). Some studies have explored the reasons for the small effect size of IPV interventions programmes, and many factors have been found, which may account for these reduced outcomes. These factors include high rates of non-attendance and treatment drop-out (Chen, Bersani et al. 1989, Hamberger and Hastings 1989, Cadsky, Hanson et al. 1996, Brown, O'Leary et al. 1997), low motivation or readiness to change, problems in the establishment of a therapeutic alliance (Taft, Murphy et al. 2003) and limited engagement in treatment activities such as homework assignments (Taft, Murphy et al. 2004). Other factors have also been identified, such as unidentified and untreated substance abuse and mental disorders, poverty, cultural mismatch, applying an inappropriate type of programme, failure to focus on noncompliance, and inclusion of generally violent men (rather than participants of IPV specifically) in programmes that are not designed to address general antisocial behaviour (Bennett, Stoops et al. 2007). The most important reason, however, for the small effects of IPV intervention seems to be that on average, 50% of the participants never complete the programme, regardless of whether they are court-ordered or not (Daly and Pelowski 2000).

Furthermore, those who do not complete IPV intervention programmes are at higher risk of continuing their IPV behaviour (Babcock and Steiner 1999, Rondeau, Brodeur et al. 2001, Gordon and Moriarty 2003, Bennett, Stoops et al. 2007). The attrition rate has also been found to be significantly related to post-offence arrests. Eckhardt, Holtzworth-Munroe, Norlander, Sibley, and Cahill (2008) found that more than twice as many intervention drop-outs (39.7%) than completers (17.9%) were rearrested for a general crime during the 13-month study period. Additionally, those who dropped out were three times more likely (8.1%) to be arrested for an assault-related charge during the study period (13 months) versus IPV programme completers (2.8%).

Several variables exist related to IPV programme drop-out, including demographic variables, violence-related variables, and intrapersonal characteristics (Jewel and Wormith 2010). Research has consistently shown that IPV perpetrators who are older, employed, married, or Caucasian, who earn higher incomes, or who have more education are more likely to complete IPV intervention than IPV perpetrators who are younger, unemployed, single, or a minority group member; who earn lower incomes, or who have less education (Daly and Pelowski 2000).

Regarding violence-related variables, mixed results have been found in terms of programme drop-out. Some studies have found that first time abusers tend to complete programmes more than repeat offenders (Babcock and Steiner 1999, Bennett, Stoops et al. 2007), while other studies have found the inverse, reporting that those who are repeat IPV perpetrators are most likely to finish the IPV programmes (Daly and Pelowski 2000, Dalton 2001). Further, there are multiple studies that show that those with a history of drug and alcohol abuse and those with higher levels of anger and behavioural problems are most likely to drop-out from IPV programmes (Daly and Pelowski 2000, Olver, Stockdale et al. 2011).

Other factors that have been found to lead to drop-out are lifestyle instability factors, motivational factors, programme and practitioner characteristics, and intervention compatibility factors (Rooney and Hanson 2001). Motivation as a reason for drop-out and its relationship with poor outcome have been identified in a number of studies (Arias, Arce et al. 2013, Eckhardt, Murphy et al. 2013, Rennie, Harris et al. 2014, Hardy, Dollahite et al. 2015, Naughton, McCarthy et al. 2015, Brown, Skelton et al. 2016, Kelley, Bravo et al. 2016). Motivation is a psychological process that is associated with an arousal, direction, intensity, and persistence of voluntary actions that are goal-directed (Mitchell 1997). It has a significant influence on performance because it combines an individual's knowledge, skills, and abilities to produce task-relevant behaviours; in doing so, it allows one to focus attention on particular task elements and encourages effort (i.e., people work harder when they are motivated) (Kwon and Lee 2017).

The high attrition rates and the increased risk of recidivism after dropping out from IPV programmes mean that addressing motivation in IPV intervention is essential (Eckhardt, Murphy et al. 2013). Furthermore, Watson (2011) suggested that low motivation and resistance are common among IPV perpetrators and it is crucial to address these to establish a working alliance and enhance the perpetrator's willingness to engage in the process of change. Given that many perpetrators are not ready to change, IPV researchers and practitioners have suggested that MI may be helpful to increase perpetrators' motivation to attend IPV intervention programmes (Kistenmacher and Weiss 2008, Musser, Semiatin et al. 2008).

Motivational interviewing is a collaborative conversation style for enhancing a person's motivation and commitment to change (Miller and Rollnick 2013), and emerged in the 1980s as a way of working with resistance. The understanding of resistance from an MI perspective has evolved and is currently understood to involve discord (a disharmony in the relationship) and

sustain talk (the client talking about not changing) (Miller and Rollnick 2013). Sustain talk and discord will be explained in the next chapter.

A high number of controlled trials over more than 25 years have demonstrated the efficacy of MI in helping people to change risky or unhealthy behaviour in a range of settings, including substance abuse treatment, mental health treatment, medical and public health settings, and criminal justice. Additionally, Wahab (2005) indicated that MI is an approach that is a good fit for social work practice and suggested it may be of benefit with other behaviours such as IPV. The next chapter will provide a detailed description of MI and how it was introduced to the IPV field.

CHAPTER 2: MOTIVATIONAL INTERVIEWING

Chapter Overview

This chapter will:

- Describe MI in more detail
- Provide an overview of the evidence for MI for behaviour change
- Introduce MI for increasing engagement in general and how it is well suited for increasing engagement in IPV
- Provide a review of the literature on the application of MI in IPV. Attention will be placed on MI as a method to facilitate IPV intervention engagement, in particular
- Introduce the aims of the current research

Introduction to MI

Motivational Interviewing is a collaborative conversation about change that aims to resolve ambivalence by strengthening a person's motivation and commitment to change (Miller and Rollnick 2013), and is usually delivered as a brief intervention (1-4 sessions) which can be utilised individually or within groups (Wagner and Ingersoll 2013). It explores ambivalence with the intention of promoting behavioural health (Rosengren 2014). In MI, the practitioners accept the person and his/her experiences (Engle 2017).

The definition of MI has evolved; previously, MI was defined (Miller and Rollnick 2002) as "a directional, goal oriented, and client-centred counselling style for eliciting behaviour change by helping clients to explore and resolve ambivalence" (p. 25). This definition expressly identified the examination and resolution of ambivalence as its central purpose, and the style of counselling is defined as intentionally directional. Miller and Rollnick's (2013) updated definition of MI, no longer includes the explicit focus on the resolution of ambivalence, but rather emphasises the strengthening of motivation for change.

Motivational Interviewing was initially developed as an approach to help people with alcohol abuse and dependence (Miller and Rollnick 2013). Its application has broadened beyond the field of addiction to a range of different behaviours, including health behaviour change (Lundahl, Moleni et al. 2013), offending (Harper and Hardy 2000, Lincourt, Kuettel et al. 2002, Stein, Monti et al. 2006, Vasilaki, Hosier et al. 2006, McMurran 2009, Anstissa, Polaschekb et al. 2011, Crane, Eckhardt et al. 2015), and treatment engagement (Carroll, Libby et al. 2001, Swartz, Zuckoff et al. 2007, Neighbors, Walker et al. 2008, Lundahl, Kunz et al. 2010, Medley and Powell 2010, Sterrett, Jones et al. 2010, Seal, Abadjian et al. 2012, Strong, Uebelacker et al. 2012, Venner and Verney 2015, Dean, Britt et al. 2016). Further, MI is now designated as an Evidenced Based

Practice (EBP), with large number of peer-reviewed articles evaluating its efficacy (Miller and Rollnick 2013). Research also indicates that MI has a more significant effect on ethnic-cultural groups who have experienced marginalisation and societal pressure (Lundahl, Kunz et al. 2010). In addition, MI appears to be a good fit with ways of interacting and working with Maori (Britt, Gregory et al. 2014).

Motivational Interviewing can be used as a stand-alone therapy (McCambridge and Strang 2004, Brody 2009), helping individuals to find the motivation inside them which may be all that is needed for a change. It can also be used in combination with other interventions (e.g., CBT), and doing so has enhanced the intervention gains (Merlo, Storch et al. 2010, Moyers and Houck 2011, Balán, Moyers et al. 2013). Motivational interviewing also can be employed as a pre-intervention method (e.g., before CBT) to increase engagement in that intervention (Kistenmacher and Weiss 2008, Brennan 2016).

Motivational Interviewing does not work on a deficiency model; instead, it communicates, "you have what you need" rather than " I have what you need" (Hettema, Steele et al. 2005). It involves a complex set of skills, and it can be learnt over time. It is a counselling style that requires the conscious and disciplined use of specific communication principles and strategies to evoke the person's motivation for change and to mitigate the resistance when it arises. It involves more listening than telling and does not seek to instill knowledge, skills, insight, or even motivation.

Four Processes in MI

There are four fundamental processes in MI, comprising engaging, focusing, evoking, and planning (Figure 2). These processes are not separate from each other, and a skilful practitioner moves back and forward between the processes as needed (Miller and Rollnick 2013).

Engaging involves establishing a sound relationship for MI to occur and continues throughout MI. Focusing is when the client and MI practitioner work together, to focus on an area(s) of potential change. Focusing is not a one-off event; there are times when there is a need to re-focus or negotiate a new focus if other issues arise that may seem necessary or relevant. During evoking, the MI practitioner works to draw out the underlying motivations for the client wanting things to be different and their desire for change. These motivations emerge early in the session (if the client has already given thought to the possibility of change) or may develop as the conversation progresses. Planning occurs when the client is ready to change and involve the client and MI practitioner working together to plan how change might happen. While the first three processes are essential in MI, planning does not always need to occur (Miller and Rollnick 2013). By engaging in the first three processes, the chances that the individual at some point may engage in a behaviour change are increased, even without planning (Miller and Rollnick 2013).

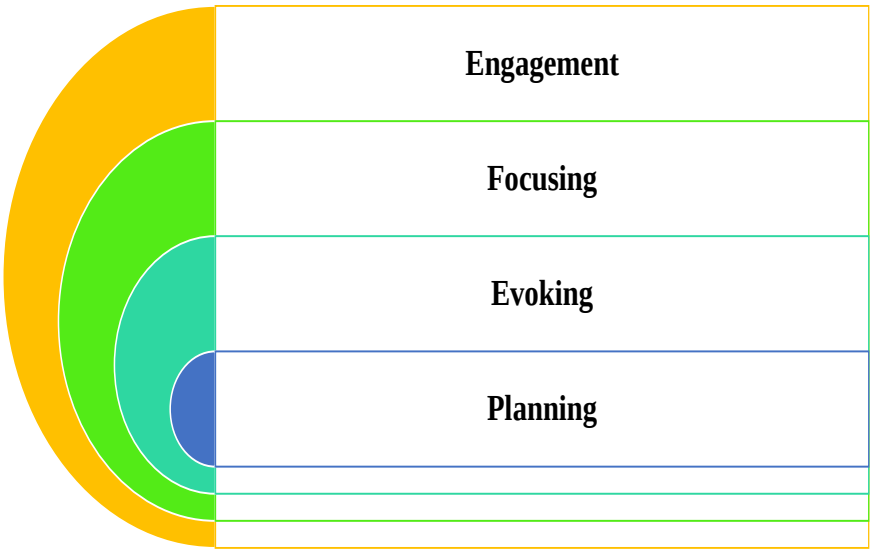

Figure 2. Processes in Motivational Interviewing

Spirit of MI

MI is not a set of techniques, but rather a 'way of being' with people. At the core of this 'way of being' is the 'spirit' of MI. Without spirit, MI is not being practiced, and the results are not as likely to be effective (Miller and Rollnick 2013). The spirit of MI (Figure 3) includes partnership, acceptance, compassion, and evocation (Miller and Rollnick 2013). The partnership is a vital aspect of the spirit of MI. It means that MI is a shared journey between the client and the practitioner. The MI practitioner has MI skills and relevant knowledge regarding a particular behaviour, and the client has his or her strengths and knowledge. This combination provides the possibility for change. Acceptance is another component of the MI spirit (Figure 4). Acceptance includes recognising and valuing the absolute worth of the client and honouring their autonomy that it is ultimately up to the individual to decide if they want to, or how to make changes. Another aspect of acceptance is empathy. It is an active interest and effort to understand individuals' perspectives and to see the world through their eyes, and the ability to communicate that understanding to them. Finally, acceptance involves affirmation to seek and acknowledge an individual's strength and efforts. Another element in the spirit of MI is compassion. To be compassionate means to actively promote the other's welfare, and to give priority to their needs. The final component of the MI spirit is evocation. To evoke is to 'bring forth.' The intention is for the practitioner to assist the individual in reaching their potential by drawing out his or her underlying motivations for wanting things to change.

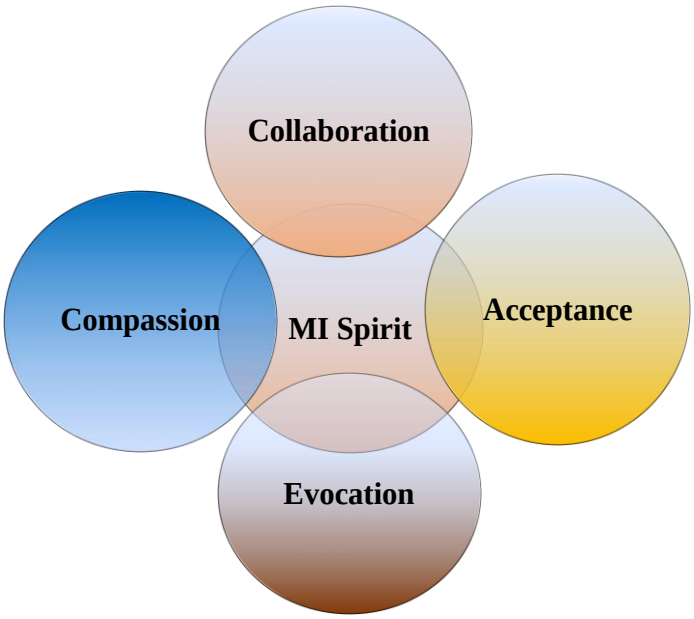

Figure 3. Spirits of MI

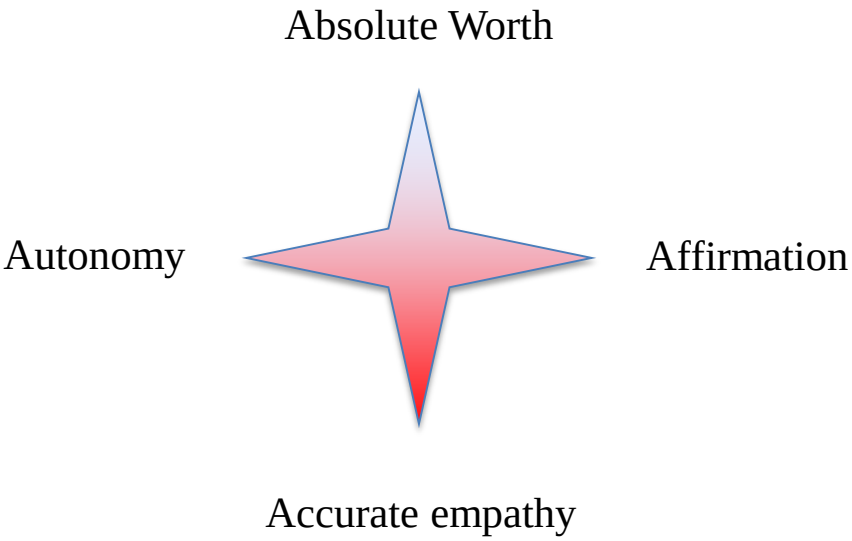

Figure 4. Four Components of Acceptance (one of the elements of Spiritis of MI as described above)

Core MI Skills

Micro-counselling skills used in MI (Table 1) include open questions, affirming, reflecting (simple, complex, reframing), summarising (represented by the acronym OARS), and providing information and advice in an MI-consistent way (Miller and Rollnick 2013). These are considered the core skills in MI, which are used throughout the four processes.

Table 1
Examples of Micro-Counselling Skills in MI

Micro- skill	Explanation	Example
Open question	Ask questions that elicit the person's internal experiences and motivations for change, and encourage responses other than 'yes/no' or brief answers.	"Where do you see yourself in 5 years if you did attend the programme and it was successful?"
Affirmation	The respect of a person's worth and capacity for growth, and explicit recognition of strength and efforts.	"You showed determination to make it to our session today despite feeling anxious about catching the bus."
Reflective listening	The use of more reflections than questions when responding to a person. Through simple reflections, the message a person has expressed is repeated, while complex reflections are more powerful by adding meaning or emphasis. Reflections are ways in which genuine empathy is expressed in MI.	Participant: "I might try group if it helps with my anger." Practitioner: "You hope that group therapy will give you some strategies to manage your anger better."
Summarizing	Provide a summary by selectively bringing together thoughts and feelings, particularly change talk, expressed after a while in a session.	Practitioner: "Your partner is worried about your anger and encouraged you to come, and even though you are unsure of how effective therapy will be, you are willing to give it a go. Your family is important to you, and you would like to spend more time with them and be a good role model for your kids."
Providing Information or advice (PAPA)	Information is presented with the client's permission. Providing information in a respectful, non-judgmental manner allows a person to feel empowered to make an informed decision with a sense of autonomy. In this study, this was guided by the acronym PAPA as illustrated in the example.	**P**ermission to discuss: "Would you be okay for me to talk about what we do in our IPV programme? **A**sk what they know: "What have you been told about IPV intervention before? **P**rovide information: A description of the programme. **A**sk a question for the person to respond: "How does that fit with how you see things?"

Change Talk

The emerging theory of MI states that MI increases client change talk and minimises sustain talk (Moyers and Martin 2006, Miller and Rose 2009, Magill, Gaume et al. 2014). The extent to which clients verbally defend the problematic behaviour (sustain talk) has a negative effect on behaviour change (Miller and Rose 2009). Conversely, the extent to which clients verbally argue for change (change talk) is directly related to behaviour change. Additionally what is essential here is not the frequency of change talk, but the strength of it, which predicts an individual behaviour change (Amrhein, Miller et al. 2003).

Change talk is talk from the client about preparing for change (Miller and Rollnick 2013), which comprises the client talking about a desire to change (e.g., "I want to stop yelling when I get frustrated"); an ability to change (e.g., "I know I can learn how to control my anger"); reasons for changing (e.g., "I want to be a better father for my children"); or a need to change (e.g., "I need to stop hitting my wife, it's just not the kind of partner I want to be"). Change talk also includes the client talking about implementing change (Miller and Rollnick 2013). This includes talk about a commitment to change (e.g., "That's it – I'm going to attend an IPV programme"); activation or preparing for change (e.g., "I will think about going to an IPV programme"); or taking steps (e.g., "I took a time out the last time that I flipped out"). Preparatory statements tend to predominate when people are still deciding to make a change, and these statements on their own are insufficient or do not necessarily predict change (Miller and Rollnick 2013). Statements considering implementing change indicate that a client is ready to take action. Commitment language signals that a client is ready to actively plan for change or is already making some positive changes.

Change talk is important because the more people hear themselves say something, the more they believe in it (Bem 1972). Research shows that when an individual uses change talk, he or she

is more likely to change his or her behaviour for the better (Miller and Rose 2009, Magill, Gaume et al. 2014). The more a practitioner draws out change talk from an individual and the stronger this change talk is, the more likely it is that the client would make positive changes. In MI, practitioners promote client change talk by first evoking and strengthening preparatory speech (concerning desires, ability, reasons, and needs) that lead to making of stronger verbal commitments to alter current unhealthy behaviours. It is these stronger verbal commitments that signal a better outcome for the client (Amrhein, Miller et al. 2003); this has also been proven through a psycholinguistic analysis of MI sessions; the strength of the commitment language predicted behaviour change better than preparatory change talk (Amrhein, Miller et al. 2003). Likewise, in a systematic literature review (n=12), it was found that practitioner's MI-consistent skills were correlated with more client language in favour of behaviour change (i.e., change talk; $r = 0.26$, $p = 0.0001$), but not less client language against behaviour change (i.e., sustain talk; $r = 0.10$, $p = 0.09$) (Magill, Gaume et al. 2014). Also, MI-inconsistent skills were associated with less change talk ($r = -0.17$, $p = 0.001$) as well as more sustain talk ($r = 0.07$, $p = 0.009$). Among these studies, client change talk was not associated with follow-up outcome ($r = 0.06$, $p = 0.41$), but sustain talk was associated with worse outcome ($r = -0.24$, $p = 0.001$). In addition, studies examining composite client language (e.g., an average of negative and positive statements) showed an overall positive relationship with client behaviour change ($r = 0.12$, $p = 0.006$; $k = 6$). The meta-analysis provided an initial test and partial support for a key causal model of MI efficacy.

Sustain talk. Sustain talk is one side of ambivalence, and as such, can be considered to be the opposite of change talk. It cannot be recognised unless the change target(s) or focus of intervention has been recognised (Miller and Rollnick 2013). Individuals can use sustain talk to indicate a desire to stay as they are, to express their concern that they will not be able to change,

and to give their reasons or commitment not to change. Eliciting sustain talk from an individual means, they will be more likely to continue as they are. In MI, the aim is not to draw out sustain talk but rather to soften sustain talk and to draw out and strengthen change talk (Miller and Rollnick 2013). However, it is important to accept and validate sustain talk and to move gently toward change talk; otherwise, the client may feel unheard, misunderstood or pushed (i.e., discord may arise).

Discord. Discord is disharmony in the relationship between the client and the practitioner. Disharmony arises when the client is not feeling heard or feels misunderstood or pushed into change. It is a normal human response to feeling pressured or challenged to do something. Discord can be expressed by clients through defensiveness, arguing, interrupting, and ignoring. For example in the statement "I'm not going to take my meds, and you can't make me," the statement "and you can't make me" represents discord (Miller and Rollnick 2013). In addition, the client might use comments such as "You're not listening," "you don't know what I'm saying," or "Are we done?" Counselling in a directive, confrontational manner increases discord, whereas conversations in a reflective, supportive manner decrease discord. Practitioners should respond to discord with reflective listening and emphasising choice and control.

How to evoke change talk. There are ten specific strategies that can help elicit change talk (Miller and Rollnick 2013):

1. *Ask Evocative Questions.* Ask open questions, the answer to which is change talk.
2. *Explore the ambivalence*. Ask first for the good things about the status quo, then ask for the not-so-good-things.
3. *Ask for Elaboration*. When a change talk theme emerges, ask for more details. In what ways? Tell me more. What does that look like?

4. *Ask for Examples.* When a change talk theme emerges, ask for specific examples. When was the last time that happened? Give me an example. What else?
5. *Look Back.* Ask about a time before the current concern emerged. How were things better? How were things different?
6. *Look Forward.* Ask what may happen if things continue as they are (status quo). Try the miracle questions: If you were 100% successful in making the changes you want, what would be different? How would you like your life to be five years from now?
7. *Query Extremes.* What are the worst things that might happen if you do not make this change? What are the best things that might happen if you do make this change?
9. *Use Change Rulers.* Ask, "On a scale from zero to ten, how important is it to you to [target change]? – where zero is not at all important, and ten is extremely important. Follow up: And why are you at "x" and not "x" [lower number than stated]? Instead of "how important" (need), you could also ask how much you want (desire), or how confident are you that you could (ability), or how committed are you to (commitment). *Explore Goals and Values.* Ask what the person's guiding values are. What do they want in life? Using a values card sort can be helpful here. If there is a "problem" behaviour, ask how that behaviour fits in with the person's goals or values. Does it help to realise a goal or value, interfere with it, or is it irrelevant?
10. *Come Alongside.* Explicitly side with the negative (status quo) side of ambivalence. Perhaps "x" is so important to you that you will not give it up, no matter what the cost is.

Evoking change talk puts the power in the client's hands as opposed to the practitioner lecturing or educating. The client finds their voice and intrinsically comes to the realisation regarding what needs to be changed, why, and how to do so (Miller and Rollnick 2013).

Motivational Interviewing and Behaviour Change

Since its introduction, MI has become a commonly used counselling method, and interest in the method continues to grow at a rapid pace. This may be due to its humanistic philosophy, being short term, and teachable to a range of people, including those with a variety of different professional backgrounds (e.g., social workers, counsellors, psychologists, doctors, nurses, etc.) and those without any prior counselling training. Several meta-analyses and reviews have demonstrated strong support for the use of MI in the areas of addictive behaviour, health behaviour, and intervention adherence (Lundahl, Kunz et al. 2010, Lundahl, Moleni et al. 2013).

A meta-analysis of 25 years of MI research (n=119 studies) found that MI had small and significant positive effects across a wide range of problem domains (Lundahl, Kunz et al. 2010). Lundahl et al (2010) also found that although MI originated in the substance abuse field, its effectiveness was much broader, extending to different behaviours, including intervention engagement. In particular, this meta-analysis found that MI significantly increased clients' engagement in treatment and their intention to change. The researchers also suggested that MI might be useful to boost an individual's confidence in their ability to change.

Another meta-analysis evaluating the efficacy of MI across medical care settings (n=48 studies) found beneficial effects for MI, with 63% of the main outcome comparisons in these studies yielding statistically significant advantages favouring MI (Lundahl, Moleni et al. 2013). The omnibus effect size (OR) suggested a 55% increased chance of MI producing a positive outcome relative to comparison interventions, which were mostly intervention-as-usual groups (55%) or waitlist (14%), or information-only controls (31%). Motivational interviewing also produced a statistically significant and positive impact on a range of outcome measures of interest to medical providers. These included dental cares, cholesterol level, blood pressure, body weight,

physical strength, quality of life, amount of alcohol consumed, dangerous drinking, smoking abstinence, marijuana use, self-monitoring, sedentary behaviour, client confidence, as well as intention to change and engagement in treatment (Lundahl, Moleni et al. 2013).

Further, a recent meta-analysis evaluated the efficacy of MI in randomised controlled trials (RCT) within primary care (VanBuskirk and Wetherell 2014). Of the 12 studies reviewed, seven targeted a substance use-related outcome. The other five studies targeted diet and exercise, medication adherence, and colorectal screening. Across all 12 studies, nine demonstrated that MI was more effective at achieving targeted outcomes than were control conditions (e.g., usual care, didactic pamphlets).

Finally, a review and meta-analysis (N=20) evaluated the mechanisms of change in MI in the treatment of mental health problems (Romano and Peters 2015). They examined a range of potential MI mechanisms, including client motivation and confidence, client resistance, and engagement. The results indicated that while MI did not increase clients' motivation more than comparison conditions, it showed a favourable effect on clients' engagement variables, such as involvement and self-exploration, attendance at therapy sessions and intervention completion, compliance with the treatment regime and completion of homework tasks.

Motivational Interviewing and Intervention Engagement

Intervention engagement has been found to be related to a number of factors including client characteristics (e.g., attachment style, motivation, and readiness to change), therapist characteristics (e.g., practitioners' warmth, optimism, and humour), and intervention factors (e.g. motivational enhancement) (Holdsworth, Bowen et al. 2014, Holdsworth, Bowen et al. 2014). Further research has shown the link between client engagement and successful intervention outcomes (Dearing, Barrick et al. 2005, Dowling and Cosic 2011, Schley, Yuen et al. 2012,

Holdsworth, Bowen et al. 2014). Much of the research on intervention engagement has focused on the therapeutic alliance, defined as the agreement between the client and practitioner regarding the goals and tasks of the intervention and the therapeutic and effective bond between them (Bordin 1979).

Therapeutic alliance also has been related to the completion of IPV intervention programmes and successful cessation of IPV behaviour. For example, Rondeau et al. (2001), using a sample of 286 IPV perpetrators, found that clients' working alliance ratings, distinguished completers and drop-outs better than a variety of demographic, interpersonal, psychiatric, and relationship status variables. Qualitative studies of successful change in IPV have also shown the importance of overcoming the lack of recognition of the problem and of developing a working relationship with programme facilitators (Scott and Wolfe 2000, Pandya and Gingerich 2002, Silvergleid and Mankowski 2006). For example, Scott and Wolf (2003) found that men who denied problems with IPV and distrusted their practitioners showed a less positive change in empathy, communication, and IPV behaviour over the programme than men who began with greater readiness to engage in the intervention.

Given the association of therapeutic alliance to positive outcomes, a viable strategy for improving engagement in IPV programmes may be to tailor the intervention to maximise clients' agreement with the goals of intervention and trust in their practitioners, as well as developing strategies that specifically address perpetrators' motivation to engage in the programme.

Motivational interviewing may be a useful approach to promoting engagement in IPV programmes as MI has been found to enhance engagement in intervention (Baker and Hambridge 2002, Dean, Britt et al. 2016); reduce drop-out (Roberto, José Ramón et al. 2004); and improve outcomes among clients who are reluctant to attend a programme and/or change their behaviour

(Lincourt, Kuettel et al. 2002, Lewis-Fernández, Balán et al. 2013, Chlebowy, El-Mallakh et al. 2015).

Zuckoff, Swartz, and Grote (2015) have noted the distinction between MI for intervention engagement and MI for behaviour change. They recommend that MI for intervention engagement should include not only consideration of motivation for changing the behaviour under consideration (i.e., changing the risky or unhealthy behaviour), but also should include consideration of additional factors that might influence engagement in intervention as a way of changing the particular behaviour.

Zuckoff et al. (2015) recommended that consideration should be given to practical barriers (e.g., cost, access, time); symptom barriers (e.g., low energy, anxiety); negative perception of the proposed intervention (e.g., too long or demanding); negative past treatment experiences (e.g., didn't work, felt disrespected or not understood); negative attitudes to help-seeking (e.g., threat to privacy, guilt about accepting help); cultural attitudes about the intervention (e.g., stigma, perception as culturally inappropriate or insensitive); and negative relationship expectations (e.g., expecting others to act in authoritarian, manipulative, or intrusive ways). These recommendations are consistent with the conclusions from Clarke, Jinks, Huand, and McMurran's (2014) review of strategies to increase engagement in intervention programmes and reduce drop-out. They concluded that addressing potential problems that the clients may have, help to maximise the effectiveness of an intervention. Tackling these problems can be achieved by offering an appointment time that suits the client's situation and providing regular reminders of the appointment. In addition, it is essential to provide information about the programme, help clients to be realistic about the programme results, to discuss the intervention and its goals, and support

them to achieve those goals. Finally, an engagement action plan to clarify different obstacles and barriers that may stop them from coming to the programme can be utilised.

Dean et al. (2016) tested Zuckoff's model for intervention engagement in a NZ study. The study aimed to determine the efficacy of MI as a brief pre-programme intervention to enhance engagement in a standard therapy setting (CBT). Ninety-six adolescents were randomised into either a control (n=50) or an MI group (n=46). The MI intervention used in the study was consistent with Zuckoff's model for intervention engagement. Results showed that participants randomised to the MI group attended significantly more CBT group therapy sessions compared to those in the active control condition. The MI group also demonstrated greater intervention initiation, and ratings of intervention readiness were significantly higher for those randomised to MI.

Motivational Interviewing and IPV Intervention

Motivational interviewing may be particularly well suited for violent individuals, such as those attending IPV programmes that may not yet be committed to active personal change. Research exists that supports the efficacy of MI as a stand-alone intervention for IPV (Schumacher, Coffey et al. 2011), and as a brief intervention to encourage additional change/help-seeking (Mbilinyi, Neighbors et al. 2011). These research studies indicated that MI might be a practical and effective intervention strategy for treating IPV.

Kistenmacher and Weiss (2008), for example, conducted a study in which 28 IPV perpetrators were randomly assigned to an MI group (n=12) or a control group (n=16). At their first visit (time 1), MI and control group participants completed three questionnaires including Conflict Tactics Scale (CTS), Stage of Change Questionnaire (SOCQ), and Blame Attribution Inventory (BAI-R). As well as the questionnaires, the MI group participants met their practitioner for 50–60 minutes and received some feedback on the results of the questionnaires. About two

weeks later, the MI group participants met the same practitioner as in time 1 for the second time for 50–60 minutes. The session focused on reducing the client's ambivalence using MI (using skills of open-ended questions, affirmations, reflections, and summaries, handling resistance and eliciting change talk). Then both MI and the control group participants completed the same questionnaires as in time 1.

The results showed that the perpetrators who received MI attributed their IPV more to internal factors rather than external factors, which was not the case for the control group. These results are particularly significant given the results of (Catlett, Toews et al. 2010), who found that those men who denied or minimised their IPV behaviour were more likely to drop-out from IPV programmes.

Given that previous research has shown that MI improves intervention engagement, reduces drop-out, increases personal responsibility for IPV behaviour, and promotes behaviour change, MI for engagement may have a useful role in enhancing intervention engagement, and outcomes for IPV programmes. The following is a review of studies of MI for intervention engagement. The review includes consideration as to whether these studies have employed MI for engagement as a pre-intervention strategy and whether it was consistent with the recommendations of Zuckoff et al. (2015) for MI for engagement.

Method

A search of publication dates from 1980 to 2017 in PubMed, PsycINFO, Science Direct, and Social Services Abstracts was conducted between March 2016–Jan 2017 utilising the terms, “Motivational Interviewing and intervention engagement,” “Motivational Interviewing and session attendance,” “Motivational Interviewing and intervention involvement,” “Motivational Interviewing and violence/offenders/perpetrators.” Inclusion criteria consisted of articles

evaluating MI to improve adherence and engagement rates. Exclusion criteria consisted of (1) articles that did not include interventions; and (2) articles that did not report on the influence of the intervention on engagement factors.

Results

Three hundred and twenty-seven articles were found with the keywords described above, between the years of 1980–2017. These articles were then further reviewed to find articles employing an MI intervention, and 20 articles were found. These 20 articles were then examined using the inclusion criteria described above, and five articles were identified in which an MI intervention was employed to promote engagement in an IPV programme and which reported on the effects of the intervention (i.e., the rate of adherence or engagement). It is important to note that two of these studies were from the same clinical trial. The first paper (Musser, Semiatin et al. 2008) evaluated the effectiveness of MI compared to a control group and the second paper (Murphy, Linehan et al. 2012) examined the programme moderator effects on different intervention outcomes such as homework compliance, session attendance, and working alliance.

Study Characteristics

The five studies ranged in sample size from one to 486. Study designs included three RCTs, one case study, and one quasi-experimental study (Table 2).

Measurement of Engagement

Different measures of engagement were employed across these studies. The measurements included intervention completion (Those who completed all programme requirements were considered as complete, and those who missed two or more sessions classified as incomplete.); homework compliance measured by Assignment Compliance Rating Scale; and intervention compliance. Intervention compliance was assessed using four outcome variables: (1) the amount

of time that elapsed between the perpetrator's date of initial referral and attendance at intervention intake session; (2) successful (versus unsuccessful) attendance at intervention intake; (3) intervention attendance, assessed by the number of sessions attended; and (4) overall intervention compliance dichotomously assessed as participants either being (a) actively involved in the process of completing the programme or (b) officially terminated from the intervention for reasons such as attendance problems, failure to pay, probation violations, or incarceration. The practitioner's report of engagement was another measurement for assessing engagement applied in the studies. Additionally, working alliance measured by the Working Alliance Inventory (WAI) was used as a proxy for intervention engagement. The WAI assessed three components: the bond between client and practitioner, agreement on goals of intervention, and agreement on tasks required to achieve the programme goals.

Other outcome measures have included recidivism measured by re-offending after programme completion and probation violations (e.g., substance use, failure to report to appointments, and failure to pay court/treatment fees); the CTS, which measured abusive relationship behaviour; and questionnaires of other help-seeking behaviour in which participants indicated whether they had obtained help from other sources (e.g., drug or alcohol counselling, marital/couple therapy, individual therapy, or other forms of counselling or therapy).

Outcomes

The earliest study (n=108, mean age: 35.7 [*SD* = 8.6]) employed MI as an engagement intervention before a CBT programme (Musser, Semiatin et al. 2008). Practitioners in the MI condition were nine doctoral clinical psychology students trained in MI. They received training in both what was called a Motivational Intake and a Standard Intake (SI) from the study researchers and administered both intakes. For the MI training, they were first given background readings on

the underlying philosophy and method of MI and the rationale for its use within IPV. Next, they attended a 15-hours workshop involving discussion of the philosophy of MI, videos from the Professional Videotape Training Series on MI (Miller, Rollnick et al. 1998), role plays of specific MI skills and ideas on how to adopt MI for IPV. After completing the workshop, the trainees conducted two 45-minutes role-plays with the study researchers who represented resistant clients. A videotape of each role-play was reviewed with the trainees, and the tapes were rated for MI adherence by the investigators, and feedback was provided on adherence ratings to promote MI skills acquisition. The method of assessing MI adherence, however, was not stated in the study. The role-play sessions were also coded by three independent coders using the First Pass Ratings Scale for MI to establish the practitioners' level of competence in MI (Miller, Moyers et al. 2008). According to the scale, at least 70% of practitioners' behaviours rated have to be consistent with MI, and in all sessions rated, the practitioners in the study exceeded the established criterion of 70% MI-consistent behaviours. Outcome measures for engagement were working alliance measured by the WAI (reported by clients and practitioners, assessed early and late in IPV intervention); homework compliance measured by the Assignment Compliance Rating Scale (scores obtained early and late in IPV intervention); and session attendance. Additionally, a self-report questionnaire was used to assess other help-seeking behaviours. Further, out of session aggressive behaviours, six months post-IPV programme, assessed by the CTS completed by clients' partners. Participants were assigned (assignment to conditions was unsystematic, but not technically random) to the Motivational Intake (n=55) or SI (n=53). The SI condition was similar to intake procedures used by the agency where the research was conducted. The goals of the SI were to gather clinically significant information from perpetrators and to inform them about the agency rules and the structure of the group counselling programme.

During the first Motivational Intake session, clients completed a brief demographic questionnaire. Next, the intake practitioner conducted a 45-minutes motivational interview with the client. At the end of the interview, the intake practitioner spent 5 minutes "wrapping-up," providing a summary of the material covered during the MI and addressing any client concerns or questions. After the first Motivational Intake session, the practitioner sent a personalised, handwritten note encouraging the client to attend the subsequent meetings and to facilitate collaboration. The second Motivational Intake session was conducted approximately two weeks after the first session. The practitioner provided personalised feedback regarding the client's responses to measures of partner abuse, anger, and relationship adjustment. The feedback portion of the session lasted 10–15 minutes, after which the practitioner engaged the client in a second MI for approximately 30 minutes. The results suggested that two sessions of the Motivational Intake, compared to SI, statistically significantly enhanced homework compliance early (d = 0.54) and late (d = 1.23) in the programme and also increased practitioner's ratings of the working alliance late in the intervention (d = 0.51). No significant effects of intake condition were found for session attendance, client reports of the working alliance, and practitioner's reports of the working alliance early in the intervention. Partners' reports of IPV, six months after CBT group, revealed that the rates of abuse were lower for those in Motivational Intake versus SI condition; however, these effects were not statistically significant. One of the other critical outcomes of Musser et al.'s (2008) study was that the Motivational Intake group participants displayed significantly greater responsibility towards their abusive behaviours compared to the control group.

This result was consistent with Kistenmacher and Weiss (2008), who found perpetrators in the MI group had a significantly greater responsibility towards their IPV behaviour relative to the control condition. They also suggested that increased responsibility for abusive behaviour may be

an outcome of MI for IPV, and this could be associated with improved intervention engagement. Overall, the findings of Musser et al. (2008) suggested that MI as preparation for intervention may increase receptivity to IPV programme and MI may have significant benefits on several indicators of intervention engagement.

In a case study with a perpetrator of IPV, Musser and Murphy (2009) evaluated whether MI for pre-intervention engagement would lead to reductions in initial hostility towards the programme, facilitate verbalisation of motivation to change, resolve ambivalence, and increase receptivity to a CBT group for IPV. A clinical psychology doctoral student delivered two 45 minutes MI sessions during the intake process at a community-based IPV based agency. The practitioner received two days of structured training that involved discussion of the principles of MI, practice of core MI skills, and review of the Professional Videotape Training Series on MI (Miller, Rollnick et al. 1998). The practitioner then completed two 45 minutes videotaped MI role-plays with an experienced practitioner, role-playing an abusive client. The trainee reviewed the role-play videos, and the researchers and trainee were provided with detailed feedback and coaching. During the intervention phase of the study, the practitioner was given regular supervision with feedback and encouragement to continue developing MI skilfulness. Musser and Murphy (2009) stated that the student demonstrated an acceptable level of adherence to MI through coding and analysis of session recordings; however, they did not provide further information as to how this was determined. Likewise, data regarding MI fidelity were not reported. The results of the study indicated that the client proceeded to complete the CBT group and was an active participant in the group. His partner's responses to the CTS revealed that they had resumed living together during the time he was in the programme, and his partner reported no incidents of physical assault, threats of violence, or property damage during the six months after he completed CBT. The two-

session MI pre-intervention sessions appear to have helped him enhance his commitment to attend the group and to have helped him become more open in participating in the CBT group.

A quasi-experimental trial (n=141, mean age 35.12 [*SD* = 9.57]) was conducted to examine whether immediate outcomes of an IPV intervention could be improved by having highly resistant clients attend a short motivation-enhancing intervention (MET) before an IPV programme (Scott, King et al. 2011). A short self-report screening measure designed for the study was used to measure resistant versus non-resistant participants. Based on the measure, approximately one third (n=141, 29.0%) of men were considered resistant to IPV intervention. The remaining 71% (n=345) of clients were classified as non-resistant. Men who were screened as having high levels of resistance attended standard IPV intervention with or without a six-week motivation enhancement pre-group and their outcomes were compared with non-resistant clients assigned to a standard group. Assignment of resistant clients to standard intervention or MET was through naturally occurring random blocks. Once a MET group start date was scheduled, the next 12 men screened as resistant and who could attend at the time the group was run, were assigned to that group. When the group was full, no other clients were invited to participate until shortly before the next start date, which was due to begin two to six months later. Clients were therefore blind to both the purpose and differences in the MET and standard groups. Clients assigned to a standard intervention (Duluth-Style) attended a 16-week group programme. During the first ten weeks, the focus was on assessing different types of violent behaviour including physical, sexual, emotional, psychological and economic. After completion of these ten weeks, participants attended a closed 6-weeks group devoted to developing personal responsibility and accountability and safety planning. Clients assigned to MET attended a total of 6 weeks in a closed group where facilitators employed MI. During the first two weeks, men told their story and facilitators empathised with their frustrations.

Facilitators also helped the men to identify any small benefits they could gain from the sessions (e.g., keep probation officer happy, reduced angry feelings when no longer fighting the system). During weeks three and four, the men were taught about violence and intimacy. The practitioners, during these groups, explored any discrepancy between the men's current relationships, and what they wished and hoped to have. During the fifth week, video clips were shown portraying different types of defensive mechanisms such as evading, denying, and blaming a partner related to abuse. The power and control wheel was introduced to the participants, and they were oriented to the structure of sessions offered in the standard intervention. They were also asked to recognise one form of violent behaviour they used and were willing to change. After the six-week pre-group was completed, the men initiated the ten weeks of standard Duluth-style intervention. Thus, both the MI and SI condition comprised a total of 16 weeks. Practitioners provided the MET intervention at the IPV agency where the study was conducted, with the same practitioners also running the standard groups.

Scott, King, McGinn, and Hosseini (2011) reported that the practitioners were given a short training session and ongoing supervision in MI, but did not provide further details regarding the training or the practitioners' fidelity to MI. Measures of engagement included intervention completion and group practitioner's final report of clients' active engagement in the group. The practitioner's final report was also coded based on the Treatment Behaviours in Batterer Intervention Programme Activities Scale (Gondolf, Foster et al. 1995), to understand the men's achievement of programme goals. Two treatment behaviours were reported as men's active engagement and accountability. For each of these domains, three trained assessors (one graduate student and two undergraduate research assistants) ranked each final report domain on a scale ranging from 1 to 4 (1 “very unsuccessful” to 4 “very successful”). Twenty percent (n=52) of the

reports were independently rated by two different assessors yielding a mean inter-rater reliability of 94.3%" ($P = 0.141$). The results showed that the resistant clients who received MET were 10.13 times more likely to complete the intervention than resistant clients assigned to SI and were 4.94 times more likely to complete the intervention than non-resistant clients who received the SI and these results were statistically significant. However, there was no statistically significant difference in the practitioners' ratings of client achievement of the intervention goals (active engagement and accountability) between the MET group and the standard intervention. Overall, the study supported the use of MI to improve intervention completion among resistant perpetrators.

In another RCT study (Murphy, Linehan et al. 2012), factors that may moderate the efficacy of a two-session MI for IPV were explored (n=83, mean age 35.7 [*SD* = 8.6]). The interventions consisted of a Motivational Intake and Structured Intake (SI), which were provided by nine doctoral students in clinical psychology. They were trained in both Motivational Intake and SI by the study's first and fourth researchers and conducted the intakes in both conditions. Training followed the same process as in (Musser, Semiatin et al. 2008). Outcome measures involved evaluating intervention moderators including the stage of change using an algorithm designed to be consistent with the trans-theoretical model of change (Prochaska and Velicer 1997). Other outcome measures consisted of measuring trait anger using the State-Trait Anger Expression Inventory (Spielberger 1988) and contemplation of change using the Safe At Home instrument (SAH). Measures for intervention engagement comprised WAI, homework compliance measured by the Assignment Compliance Rating Scale, and CBT group session attendance. Partners' report of IPV six months after completion of CBT groups was assessed using the CTS. Both Motivational Intake and SI conditions lasted for two sessions, occurring approximately two weeks apart. Questionnaires and semi-structured interviews were the primary tools for practitioners to gather

information from the participants. The Motivational Intake condition was four hours, and the SI condition was 3½ hours in duration. The Motivational Intake procedures and the content of the programme were the same as described in (Musser, Semiatin et al. 2008). After the Motivational Intake and SI sessions, both intakes participants were referred to a 16-week CBT group. The results showed that the Motivational Intake increased readiness for change among those who were initially reluctant to change their IPV behaviours (those endorsing pre-contemplation, contemplation, or preparation before intake). However, MI participants who were in the maintenance stage before intake exhibited regression in their stage of change but had greater CBT homework compliance. After MI, those who were high in contemplation of change had a greater working alliance. Additionally, MI led to greater group session attendance for those with high trait anger. All changes were statistically significant. Further, analysis of post-CBT physical partner assault showed a significantly greater benefit of MI for participants in the pre-contemplation stage of change and with a lower level of trait anger. Note, however, that this last result should be interpreted with caution because re-assault rates were generally low in this study, especially in the Motivational Intake condition. Also, this finding was contrary to the researchers' hypothesis as they expected greater benefits of MI for those with higher levels of trait anger based on the conclusions of the Project MATCH (Project Match Research Group 1997). Overall, however, these results suggested that MI for engagement might have the greatest beneficial effects for those who are most reluctant to change.

In the most recently published study, Crane and Eckhardt (2013) in an RCT evaluated a single session MI intervention (Brief Motivational Enhancement – BME) for men (n=82, mean age 33.9 5[*SD* = 11.9]) who had perpetrated IPV. A graduate student practitioner conducted the MI sessions following training in MI which included reading manuals on how to treat an abusive

partner, practicing BME skills through role-playing exercises, and continued discussion of each strategy over two weeks (1–2 hours per weekday). The student was trained by a trainer who Crane and Eckhardt (2013) described as “MI scholar and experienced BME therapist” (p.182). However, they did not provide any further information about the trainer's qualification and experiences relating to MI. Additionally, eight sessions (16.7%) were recorded, transcribed, and reviewed by an unbiased reviewer for fidelity to MI standards and skills using the Motivational Interviewing Treatment Integrity (MITI) Code system, version 3.1.1. Coding of randomly sampled segments of each tape concluded that the graduate practitioner had achieved 92% adherence to MI standards.

The men were randomly assigned to either the MI condition (n=48) or a control condition (n=34). In the control condition, males received additional information about the specific terms of their probation and completed an unrelated computer task designed to standardise the duration of sessions between the two conditions. During BME, if change talk was not present, the session began with a brief description of the abusive event using the participant's own words and then open-ended questions and reflections were used to elicit change talk. Otherwise, the sessions began with a review of the participant's responses to items from the SAH questionnaire that evidenced acceptance of problems related to IPV or a desire to change aggressive behaviour. The practitioner affirmed the thoughts and feelings of the client and strategically reflected these in a manner consistent with MI. When clients demonstrated a willingness to change, the interview concluded with the completion of a standardised change plan worksheet detailing how the client predicts the change to happen. IPV intervention programme attendance and completion, as well as re-arrest records, served as the primary outcome measures and were collected six months post-intervention. The results showed that the MI participants had significantly greater IPV intervention compliance compared to the control group (d = 0.47). Additionally, relative to control participants, those in

the MI condition attended statistically significantly more sessions (d = 2.3). Despite these effects, however, there were no statistically significant differences in recidivism between two groups (d = 0.22). In general, the study indicated that employing a single session of MI as a pre-group intervention improves perpetrators' attendance and compliance with the programme.

Table 2
Articles in the Review of MI for Enhancing Engagement in IPV Programmes

Author (year)	Sample Size	Type of the Study	Type of the MI delivered	Major Outcomes
Musser et al. (2008)	189	RCT	Two sessions of Motivational Intake containing MI and feedback	Motivational Intake enhanced Homework Compliance early (d=.54) and late in treatment (d=1.23) Other Help-Seeking Behaviour was 66% in MI versus 41% in SI condition
Musser & Murphy (2009)	1	Case Study	Two sessions of Motivational Intake containing MI and structural feedback	MI enhanced Therapeutic Alliance, decreased ambivalence towards change, and increased commitment to personal change
Scot et al. (2011)	486	Quasi-experimental	Motivational Enhancing Intervention for six weeks	The drop-out rate for resistant clients in MI was 15.8% versus 53.5% in Control Condition. The programme completion rate for resistant clients in MI was 84.2% versus 46.5 in Control Condition
Murphy et al. (2012)	83	RCT	Two Session of Motivational Intake containing MI and feedback	Treatment Moderator effects (P Value) on Working Alliance, Homework Compliance, and number of sessions attended was: 0.03, 0.03, and 0.003 respectively
Crane et al. (2013)	82	RCT	Single Session of Brief Motivational Enhancement (BME) Intervention	Treatment Compliance was 72.9% in BME versus 50% in the Control condition (d=.47)

Discussion

While the studies suggested that MI may produce positive effects for IPV intervention engagement, none of them provided MI for engagement consistent with Zuckoff's conceptualisation. That is, the descriptions of the MI provided in the studies were of MI for changing the IPV behaviour rather than MI for enhancing the engagement of perpetrators in IPV intervention. MI for intervention engagement should not only include factors related to behaviour change but also should include discussion of factors that increase involvement in the intervention. These factors consist of cost, access to the intervention, time, other barriers, which may get in the way of participants coming to the programme sessions, negative perception of the proposed intervention, negative past experiences, and negative attitudes to help-seeking and negative relationship expectations.

It was also difficult to draw conclusions from the studies, as there have been a number of different outcome measures to evaluate engagement across studies, such as the number of sessions attended, completion of group programmes and homework compliance. Inconsistent measurements of engagement contribute to confusion about the scope of engagement and reflect the lack of theory (Holdsworth, Bowen et al. 2014, Holdsworth, Bowen et al. 2014). In regards to intervention engagement and its measurement, it was important to note that attendance may not reliably imply engagement. Out of session behaviours such as help-seeking behaviours (which indicated the type and frequency of help the perpetrators sought from other sources), and the occurrence of IPV behaviour (e.g., using the CTS), may also be useful measures of engagement. Three of the studies examined in the review have evaluated intervention engagement using the CTS (Musser, Semiatin et al. 2008, Musser and Murphy 2009, Murphy, Linehan et al. 2012), while

Musser et al. (2008) and Murphy et al. (2012) have used other help-seeking behaviour as well as CTS.

Furthermore, a common problem in MI research in general, and MI research in the IPV area is a lack of description of the MI training and also a lack of reporting of data on the fidelity of MI, which was seen in the study conducted by Scott et al. (2011). When practicing MI, it is crucial to know whether clients are getting an acceptable level of MI. The most widely used measurement of MI fidelity is MITI. Using MITI ensures researchers that MI intervention has been implemented accurately as it was planned. Some studies have found that MI-consistent skills can predict positive client change (Dunn, Darnell et al. 2016, Fischer 2016) and MI-inconsistent behaviours have been shown to predict worse clinical outcomes (Apodaca and Longabaugh 2009); this suggests that fidelity to MI is a significant predictor for MI effectiveness.

In the literature review, except for Scott et al. (2011), information regarding MI training was provided. However, in those studies, MI was delivered by beginners and students. Being a novice in employing MI might result in a lack of strength of the intervention, which would then fail to find significant treatment effects. On the other hand, if an experienced practitioner conducts MI and there is no fidelity check, the question arises that the positive effects may not be the result of MI. A highly skilled practitioner is likely to have the ability to have a positive therapeutic impact, regardless of whether he or she is adhering to the principles of MI (Drymalski and Campbell 2009). All studies in the review, except for Musser and Murphy (2009) and Scott et al. (2011), provided data about fidelity to MI. Moreover, a lack of longitudinal data to clarify whether MI led to reduced offending was a common problem in IPV studies. Among studies that evaluated recidivism, in all except for Murphy et al. (2012) and Musser and Murphy (2009), although MI was effective in enhancing engagement, there was no significant reduction in recidivism after six

months follow up. The effects of MI for engagement on behaviour change is not a direct relationship. Motivational interviewing for engagement may lead to engagement in the behaviour change intervention, and in turn engagement in the behaviour change intervention may lead to behaviour change). When a study shows that MI for engagement increases engagement, but this does not result in behaviour change, the problem could lie either with the intervention that clients were assigned to or with the engagement intervention. More research is required to understand the link between these two concepts.

Conclusions

High rates of non-attendance, and attrition following the first session of IPV suggests the importance of early motivational enhancement either before, or early on in intervention. Motivational interviewing for intervention engagement may be a useful prelude or preparation for IPV programme to enhance motivation or readiness to change, intervention involvement, and session attendance. Although the results of the studies reviewed indicated that MI for IPV intervention engagement has promise, further research is required to address the limitations in past research. Measurement of and reporting data on the fidelity of MI is crucial. Furthermore, research needs to make the distinction between MI for IPV intervention engagement as conceptualised by Zuckoff et al. (2015) and MI for IPV behaviour change. Based on the results from the review, the aims for subsequent studies, the research questions, and hypothesises were developed. It is important to note that Zuckoff's conceptualisation of engagement intervention does not have a large body of evidence behind it and should be regarded as a hypothesis to be tested for its effectiveness which the current study aimed to address.

Research Aims

The objectives of the study were to:

- Analyse the rate of IPV intervention commencement and completion at Aviva and SVS over 12 months from 1 June 2016 to 31 May 2017 (Study 1).

- Evaluate the effectiveness of MI training for practitioners working in the IPV area (Study 2) to prepare them for the outcome study (Study 3).

- Assess the effectiveness of MI as a brief pre-intervention engagement method to see whether it will enhance the engagement of male perpetrators in IPV intervention (Study 3).

Research Question 1

What is the IPV intervention commencement and completion rate at Aviva and SVS?

Research Question 2

Will practitioners who receive the MI training demonstrate increased skilfulness in their knowledge and skills to apply MI?

Hypothesis: Practitioners who receive MI training would have increased skilfulness in their knowledge and skills to apply MI.

Research Question 3

Will participants receiving MI rate their readiness for engaging in IPV intervention, higher than participants in the control condition?

Hypothesis: Participants who receive MI would rate their readiness to engage in IPV intervention higher than the participants in the control condition.

Research Question 4

Will participants who receive MI commence IPV intervention at a higher rate than participants in the control condition?

Hypothesis: Participants who receive MI would commence IPV intervention at a higher rate than the control participants.

Research Question 5

Will participants who receive MI attend a higher mean number of standard IPV sessions than participants in the control condition?

Hypothesis: Participants who receive MI for engagement session would attend a higher number of IPV sessions than the control condition.

Research Question 6

Will participants who receive MI complete IPV intervention at a higher rate than participants in the control condition?

Hypothesis: Participants who receive MI for engagement session would complete IPV intervention at a higher rate than the participants in control condition.

Research Question 7

Will participants who receive MI rate the importance of making a change to their IPV behaviour, and their ability and commitment to change this, higher than the control participants?

Hypothesis: Participants who receive MI will rate the importance of making a change to their IPV behaviour, and their ability and commitment to change this, higher than the control participants.

Research Question 8

Will readiness to initiate IPV intervention, the level of importance to make a change in IPV behaviour, and ability and commitment to do so, predict IPV intervention commencement and completion?

Hypothesis: Intervention commencement and completion can be predicted by the level of readiness to initiate IPV intervention, the importance to make a change in IPV behaviour, and ability and commitment to do so.

CHAPTER 3: DESCRIPTION OF AGENCIES

Chapter Overview

This chapter will:

- Describe Aviva and SVS, where the current research took place
- Describe differences between Aviva and SVS in terms of the services they provide to clients

Introduction

The current research was conducted at Aviva and SVS, which are the two main providers of IPV services in Christchurch (a metropolitan city in NZ). Aviva is a not-for-profit agency dedicated to supporting NZ families to become their best, free from violence. Aviva started its operation in 1973 as the Christchurch Women's Refuge. Stopping Violence Services has provided non-violence programmes for men and women since 1983 and youth since 2008.

Originally it was planned for a pilot study to be conducted at He Waka Tapu starting in September 2016. He Waka Tapu is a Māori non-governmental organisation, which is contracted to provide group stopping violence programmes for perpetrators referred via the Community Probation Service or the Family Courts. However, there was a problem with recruiting participants due to clients at He Waka Tapu cancelling or not turning up for appointments, and those who did present were not willing to participate in the pilot study. Due to the difficulties experienced at He Waka Tapu, the possibility of undertaking the research at another organisation in Christchurch providing IPV intervention was considered. Discussion (from January to February 2017) was initiated with Aviva in Christchurch, and the CEO indicated that they were supportive of the research being conducted at their organisation. The study commenced at Aviva in July 2017. After one month, in August 2017, since the recruitment of the control group (Chapter 6) was low, a conversation was initiated with SVS about their potential involvement in the research as well. They agreed to collaborate with the study, which commenced at SVS in October 2017.

The Host Organisations

Aviva Family Violence Services

Aviva services include working with children, youth, and sexually assaulted people. Aviva has also designed a peer support programme – the first of its kind in NZ – which draws upon the power and wisdom of those who have overcome IPV to support others on their same journey. They also provide free 24-hour support and information phone line which is available throughout NZ, and in partnership with Auckland based agency "Shine," they deliver the safe at home services to high-risk families in Canterbury. Finally, Aviva supports people to overcome the use of IPV through their Reach-Out service. In 2016-2017, 155 referrals were received, and 81 (52%) clients actively engaged in the service. In 2017-2018, from 105 referrals, 60 (60%) were supported by the Reach-Out team at Aviva. Aviva defines engagement as four interactions or more, and at least one of which must be face-to-face.

Reach-Out is an early intervention service for men wanting support to move away from a life of relationship conflict, anger, and violence. Many men go to Reach-Out through self-referrals, and they are also contacted when their names appear on police incident reports that Aviva receives. Aviva has also been involved in the Integrated Safety Response (ISR) launched in July 2016. The ISR sees core agencies, including the police, Oranga Tamariki, the Department of Corrections, health, specialist family violence NGOs, and kaupapa Māori services, and they work closely together as a team to provide intensive support to high-risk families. A key feature of ISR is that those identified as high risk of severe to extreme IPV are immediately supported by a family violence specialist, to reduce the risk of further violence. Regardless of the pathway into the service, each man identifies his own needs and goals. Further, those who are contacted through

ISR can choose whether to accept the support offered to them or not, and they are not mandated to attend any intervention if they do not wish to do so.

Aviva has been publicly acknowledged for Reach-Out success in reducing IPV. In May 2016, Reach-Out received two awards at the national Problem-Oriented Policing (POP) Awards. These awards recognise long-term, sustainable crime prevention and reduction. Reach-Out, in partnership with the Canterbury Police, won the award for excellence in reducing repeat victimisations and also received the Supreme Award across all categories. In October, Aviva and the NZ Police presented Reach-Out at the 2016 international POP conference in Arizona, USA. Although Reach-Out was selected as one of only seven out of 27 finalists to be shortlisted for the major Herman Goldstein Award, it did not receive the award. The judges, however, were rightly impressed by its success in making families and communities safer.

How Aviva works. Following an initial telephone conversation, Aviva's practitioners arrange to meet at an Aviva office or other mutually agreeable location (e.g., café). Then, they work with the man to mutually develop an individualised plan to work towards more positive relationships, and in follow-up meetings they will meet one-on-one, usually once a week, depending on the needs of the client. After the client has shown the ability to self-manage and has developed strategies to assist with this, the sessions are tapered off to once per 2-3 weeks. Each session is usually one hour in duration, although they can be more depending on the level of support needed and current events in their life/relationship.

The purpose of the sessions is to learn what is going on for the client, what is working for them, what they want to work on and to help them recognise what is safe and unsafe in the relationship they have, and to support them to move in the direction they identify they want to take. The aim is to help them develop skills/mastery in their lives to build confidence, self-esteem

and positive connections that support and enable them to make the changes they want/need. Another purpose is to help them to recognise types of abuse. This is because perpetrators of IPV often do not realise that abuse can come in many various forms, not just physical/sexual/verbal. The IPV intervention is considered as completed when the objectives for the programme as mentioned above have been achieved. The intervention usually lasts between 6-12 sessions and can be more depending on the needs and requirements of the client.

Stopping Violence Services

Stopping Violence Services works with men, women, and youth, and provides assessments and non-violence programmes predominantly for the Ministry of Justice, the Department of Corrections, and self-referred clients. It is committed to the objective of the Domestic Violence Act 1995, "Stopping or preventing domestic violence on the part of those offenders who use violent and controlling behaviours that violate the right of another person, and that safety, autonomy, and wellbeing, and the safety of women and children is paramount." Stopping Violence Services also delivers emergency accommodation for men and women who receive a Police Safety Order (PSO), and they play an integral part in the ISR in Christchurch. Clients referred to SVS for IPV intervention from the Family Court and the Department of Corrections are mandated to attend a stopping violence programme. If they decide not to attend, they could be fined or sent to prison for up to six months. These clients are under close supervision on behalf of these organisations, and practitioners must report monthly or weekly on their attendance to either the Family Court or Department of Corrections. Stopping Violence Services also receive self-referrals. These clients go to the SVS voluntarily. The number of referrals to SVS is about 50 clients per week which include the Family Court, Department of Corrections and self-referrals. Also, from July-2018 to February 2019, the number of referrals that SVS received was 552 excluding self-referrals. Data

at SVS also suggested that from these 552 referrals, 51 (9.23%) were re-referred to this agency. Those were clients who either did not complete the programme, or those who completed the intervention, but were referred again due to ongoing issues with IPV.

How SVS works. The IPV intervention approach at SVS begins with an assessment. The assessment includes obtaining necessary information like their living status, culture, and ethnicity and also clarifies the conditions of the court order (when there is one). Within two weeks of the initial assessment, the perpetrator is given a second appointment with the same practitioner. The second appointment comprises a comprehensive assessment, which includes a collection of social history, criminal history, violence history, family history, education history, alcohol and drug history, and risk for lethality. Their goal and values are also identified. Education and intervention begin during the assessment as the perpetrator starts to learn about relevant IPV issues. When substance abuse is identified, the perpetrator will be referred to a substance abuse treatment agency, and after substance abuse treatment has been established, the perpetrator often re-enter the IPV programme. Once the assessment phase is completed, the type of intervention programme will be determined by the practitioner considering the perpetrator's risk and needs. If there are no substance abuse or mental health issues (i.e., severe depression with suicidal thoughts or un-medicated depression), and the perpetrator has accepted responsibility for his violence, a non-violence group programme is usually recommended. In general, the non-violence groups use a psycho-educational format and are co-facilitated by a male-female team. They are required to attend weekly for 10-16 sessions per week, each lasting for 2.5 hours. The goal of these groups is the termination of violence and the control tactics used by the perpetrator. If the perpetrator is not suitable for a group programme, he is entered in a one-on-one intervention that lasts for 10-14

weeks, depending on his needs, and each session lasts for an hour. The client's programme is considered complete after finishing the number of sessions he was assigned to.

The next chapter will describe the audit of IPV intervention commencement and completion at Aviva and SVS.

CHAPTER 4: AUDIT STUDY

Chapter Overview

This chapter will:

- Review literature on IPV intervention drop-out and outcome
- Describe the audit of IPV intervention commencement and completion at SVS and Aviva
- Analyse the rate of IPV intervention commencement and completion at Aviva and SVS over 12 months
- Determine what client characteristics, if any, predict IPV intervention commencement and completion

Introduction

Studies have shown that interventions for IPV have very modest effects (Babcock, Green et al. 2004). Physical abuse recidivism rates after intervention are high (15– 47%), and verbal abuse levels often remain elevated as well (Taft, Murphy et al. 2003). Intervention drop-out is an area of great concern in IPV programmes (Eckhardt, Murphy et al. 2006). Programme completers have been found to display lower rates of recidivism than drop-outs (Grusznski and Carrillo 1988, Chen, Bersani et al. 1989), suggesting that better retention may enhance overall programme effects. Although there have been many studies comparing perpetrators who completed intervention with those who dropped-out, these studies frequently report contradictory findings. Some indicate that abusive men who drop-out of intervention are younger, unemployed, less educated, more likely to abuse alcohol, have a previous criminal history, and are either single or separated from their partner (DeMaris 1989, Cadsky, Hanson et al. 1996). Conversely, other studies have discovered either inconsistent or no significant differences between intervention completers and drop-outs on these variables (DeHart, Kennerly et al. 1999, Hamberger, Lohr et al. 2000).

Further investigation into the correlates of drop-out may prove essential in modifying IPV programmes to retain individuals in intervention, reduce post-programme recidivism for those who currently drop-out, and accurately evaluate programme success. The current study was designed to assess the rate of intervention commencement and completion at Aviva and SVS. Additionally, the study evaluated what (if any) client characteristics predict intervention commencement and completion at these agencies. Both IPV intervention commencement and completion are used in the current study as a proxy measure of engagement.

Method

Individual client data were collected from SVS and Aviva for 12 months before the MI study (Chapter 6) was initiated. At SVS, these data were obtained through an electronic data-based system called Excess. Data for individuals who had referred to SVS from 1 June 2016 to 31 May 2017 and had all the variables required for the study were collected. These variables included age, ethnicity, education, employment, the criminal history of violence, type of violence, type of referral (mandated or non-mandated), and the time (the season) that these clients were referred to SVS. This resulted in 111 entries (individual clients) from SVS. At Aviva, upon request, the administration team provided data for 155 individuals who had been referred to their agency and 81 out of these 155 referrals received support for the same time period as for SVS (the rest of the individuals did not receive support due to practitioners not being able to contact them for reasons such as unavailability of the phone numbers or the clients refusing to receive support). Among these individuals (81 out of 155), 52 clients who had all the required variables, including age, ethnicity, and time of referral, were selected for final analysis. Other variables as mentioned for SVS were not included in the data provided by Aviva.

Analysis

A frequency analysis using the SPSS software version 21 was conducted. The data were then analysed using a binomial logistic linear regression model and a chi-square test. The model for linear regression included all factors that might have an impact on the dependent variables (intervention commencement and intervention completion) such as age, ethnicity, education, employment, history of previous criminal violence, type of violence, type of referral (mandated or non-mandated), and the time (the season) that clients were referred to Aviva and SVS. Intervention commencement was defined as being enrolled in the programme and attending the first session.

Intervention completion was defined as when the client completed the duration of their pre-determined intervention programme. At Aviva, after the clients achieved the goals of the programme (recognising what was safe and unsafe in the relationship, developing skills/mastery in their lives to build confidence, self-esteem, and positive connections, and making the changes they want/need), and at SVS when the clients finished the number of IPV sessions to which they were assigned.

Binomial logistic regression. A binomial logistic regression is used to predict the probability that an observation falls into one of two categories of a dichotomous dependent variable based on one or more independent variables that can be either continuous or categorical (Hilbe 2009). In many ways, binomial logistic regression is similar to linear regression, except for the measurement type of the dependent variable (i.e., linear regression uses a continuous dependent variable rather than a dichotomous one). As with other types of regression, binomial logistic regression also can use interactions between independent variables to predict the dependent variable (Hilbe 2009).

Chi-square test of association and homogeneity. The chi-square test for association tests whether two categorical variables are associated. Another way to phrase this is that the test determines whether two variables are statistically independent (Agresti 2013). For this reason, the test is also often referred to as the chi-square test of independence. More specifically, it tests for the association/independence between two nominal/dichotomous variables. The test does not distinguish between dependent and independent variables, although the type of study design might do so. The chi-square test for association determines whether an association exists between two nominal variables. It does this by comparing the observed frequencies in the cells to the frequencies expected if there was no association between the two nominal variables. The greater the association

between the two nominal variables, the greater the individual would expect the observed frequencies to differ with the expected frequencies. The converse is also true. The less the two nominal variables are associated, the closer the observed frequencies will be to the expected frequencies. Indeed, this is how the chi-square test for association works. It produces a statistic based on the overall "amount" of difference between the expected and observed frequencies. The further the observed frequencies are to the expected frequencies, the larger the test statistic, the greater the association, and the more likely a statistically significant result will occur (i.e., indicating that an association exists) (Agresti 2013).

The chi-square test of homogeneity is used to determine if a difference exists between the binomial proportions of three or more independent groups on a dichotomous dependent variable (Agresti 2013). It will let an individual determine whether the proportions were statistically significantly different in the different groups (i.e., whether the proportions in each group were equal in the population). If there were statistically significant differences in proportions, a post hoc test could be used to determine where the differences between these groups lie (e.g., whether the proportions were different between group 1 and group 2) (Altman 1991). However, if the data violate the sample size assumption of the chi-square test of homogeneity, a multiple Fisher's exact tests (2 x 2) as a post hoc analysis could be carried out (Blalock 1972, Altman 1991).

Results

Stopping Violence Services

The demographic characteristics of the clients at SVS are summarised in (Table 3). Clients ranged in age from 20 years to 64 years old, with a mean age of 38.28 years old (*SD* = 10.79). In regard to ethnicity, 72.1% were NZ European, 13.5% Māori, and 14.4% were identified as other ethnicities. Based on the recent data on ethnic groups of Christchurch city residents in 2013, NZ

European comprised 69.6%, Maori 6.6%, and other ethnicities 12.9% of the population (Stat 2013). It seemed that the number of Maori (13.5%) in the current study was disproportionately high compared to the general population of 6.6%. Maoris, in general, include a higher number of the perpetrators' population in NZ, and based on the recent data released from the Department of Corrections in March 2019, NZ European comprised 30.7%, Maori 51.3%, and other ethnicities 18% of the prison population (statistics 2019). These perpetrators were convicted of offences across multiple categories, and 59.2% of these were related to IPV charges.

The majority (73%) of the clients were employed, and they were fairly evenly split between those who had less than high school (56%) and those who had high school education (48%). In total, the majority (74.8%) reported a history of violence other than IPV. Also, more than three quarters (78.4 %) were mandated to the programme. Among those who were mandated, most (89.2%) commenced the intervention, and most (81.8%) completed it.

Binomial logistic regression was performed to ascertain the effects of age, ethnicity, employment status, level of education, the criminal history of violence, type of violence, type of referral (mandated or non-mandated), and the time of referral (the season) regarding the likelihood that participants commenced IPV intervention. The linearity of the continuous variables in regard to the logit of the dependent variable was assessed via the Box and Tidwell (1962) procedure, and the only continuous independent variable (age) was found to be linearly related to the logit of the dependent variable. Normality and linearity were also checked, and it was normal.

The logistic regression model was started with all the variables of interest. Then, less significant variables were dropped out one by one to select the better model. As per the final model, the type of referral variable was found to be statistically significant, while psychological abuse was partially significant. The model was statistically significant $\chi 2$ (2) = 9.66, $p < 0.05$, and

explained 16% (Nagelkerke, R2) of the variance for the commencement of intervention and correctly classified 89.2% of cases. Based on the model, those who were mandated had 6.09 times higher odds to commence IPV intervention. The results are summarised in (Table 4).

Table 3
Characteristics of Clients at SVS

Characteristics	**N=111**
Type of Referral	
%Mandated	78.4
%Self-Referral	21.6
Age	
Min	20
Max	64
Mean	38.24
Ethnicity	
% NZ	72.1
% Maori	13.5
%Other	14.4
Education	
%Less than high school	56
%High school	48
%More than high school	7
Type of Violence	
%Physical	69.4
%Psychological	63.1
%Verbal	91
%Sexual	4.5
Time of Referral	
%Spring	19.8
%Summer	27.9
%Autumn	31.5
%Winter	20.7
Number of Session Attendance	
%0	10.8
%1-10	49.5
%11-16	39.6
Intervention Commencement	
%Yes	89.2
%No	10.8
Intervention Completion	
%Yes	81.8
%No	18.2
History of Violence	
%Yes	25.2
%No	74.8
Employment	
%Yes	73
%No	27

Table 4
Logistic Regression Predicting the Likelihood of Intervention Commencement at SVS

	B	SE	Wald	df	P	Odds Ratio	95% confidence interval	
							Lower	Upper
Mandated	1.80	0.67	7.17	1	0.007*	6.09	2.30	16.08
Psych Abuse	-1.56	0.84	3.38	1	0.06	0.21	0.06	0.71
Constant	2.03	0.77	6.93	1	0.008	7.63		

The same procedure was applied to understand whether intervention completion could be predicted with any of the mentioned above variables. The logistic regression model was not statistically significant this time, suggesting that none of the variables predicted IPV intervention completion at SVS.

Differences between mandated and non-mandated clients at SVS. To understand the differences between mandated and non-mandated clients in regard to IPV intervention commencement and completion, a chi-square test of association was conducted. However, given that one of the cells had expected cell frequencies less than five, Fisher's exact test was run instead. There was a statistically significant difference (p = 0.02), and a moderate association between intervention commencement and type of referral, φ = 0.24, p = 0.01, suggesting that mandated clients were more likely to commence the intervention. These results indicated that among 24 non-mandated clients at SVS, 75% (n=18) commenced intervention, and of the 87 mandated clients, 93.1% (n=81) commenced the IPV programme (Figure 5).

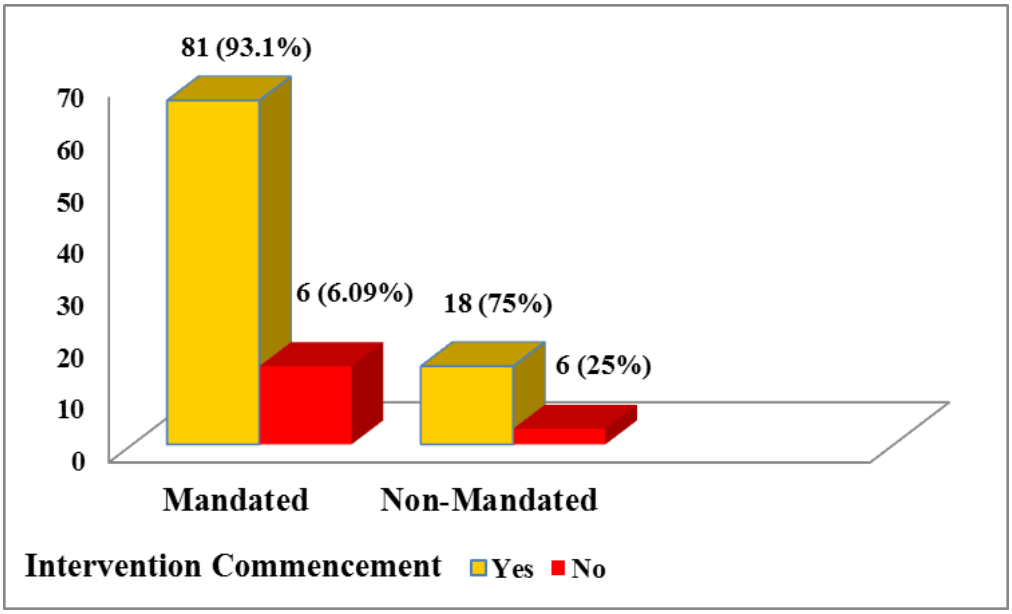

Figure 5. Differences between Mandated and Non-Mandated Clients in Regard to Their Intervention Commencement at SVS

In regard to intervention completion, of the 18 clients who commenced the programme and were not mandated, 83.3% (n=15) completed the programme. Similarly, of the 81 clients who were mandated and commenced the intervention, 81.5% (n=66) completed it. The Fisher exact test showed that the difference between the two independent binomial proportions was not statistically significant ($p > 0.05$). This means that no statistical differences between mandated and non-mandated clients existed regarding their intervention completion (Figure 6).

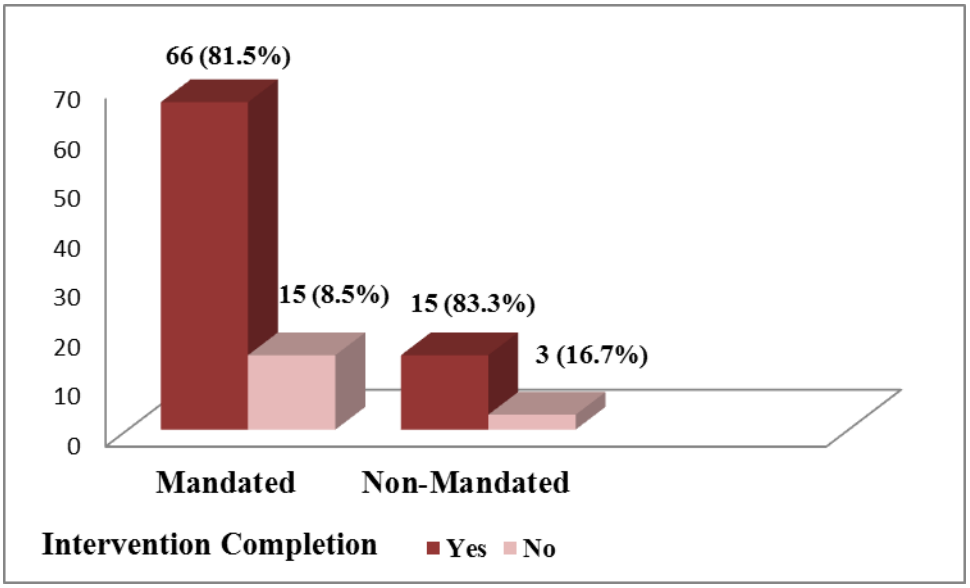

Figure 6. Differences between Mandated and Non-Mandated Clients in Regard to Their Intervention Completion at SVS

Aviva Family Violence Services

The demographic characteristics of the clients at Aviva are summarised in (Table 5). The clients ranged in age from 22 years to 57 years old, with a mean age of 38.03 years old (*SD* = 7.85). In regard to ethnicity, 63.5% were NZ European, 17.3% Māori, and 19.2% were identified as other ethnicities; this was not comparable to the population in Christchurch as based on the recent data on ethnic groups of Christchurch city residents in 2013, NZ European comprised 69.6%, Maori 6.6%, and other ethnicities 12.9% of the population. All the clients were non-mandated. More than half of the clients (84.6%) commenced the IPV programme, and less than half of them (46.2%) completed it.

Binomial logistic regression was used to explore whether intervention commencement and completion can be predicted by client characteristics. The logistic regression equation predicting the probability of commencement or completion of the intervention was not statistically

significant. As a result, age, ethnicity, and time of referral (the season) were not statistically significant predictors of commencement or completion of IPV intervention at Aviva.

Table 5

Characteristics of Clients at Aviva

Characteristics	**N=111**
Intervention Commencement	
%Yes	84.6
%No	15.4
Intervention Completion	
%Yes	46.2
%No	53.8
Age	
Min	22
Max	57
Mean	38.03
Ethnicity	
% NZ	63.5
% Maori	17.3
%Other	19.2
Time of Referral	
%Spring	21.2
%Summer	40.4
%Autumn	23.1
%Winter	15.4

Discussion

The study demonstrated that none of the demographic variables predicted IPV intervention commencement or completion at both Aviva and SVS. This suggested that both organisations were providing an intervention that was acceptable to a range of clients (i.e., regardless of education level, employment status, ethnicity, and age). Type of referral, however, was a statistically significant predictor of intervention commencement at SVS, with mandated clients more likely to commence intervention compared to non-mandated clients. Previous research, however, has found that being mandated was a statistically significant predictor for intervention completion (Hamberger and Hastings 1989, DeHart, Kennerly et al. 1999, Barber and Wright 2010).

Previous literature has identified predictors of IPV intervention commencement and completion as: (1) demographic and psychological variables, (2) being mandated (by a legal body), or (3) characteristics of the intervention itself (Buttell and Carney 2005). The majority of past research has found that perpetrators with lower age, lower education, lower income, and higher unemployment or a previous criminal history are more likely to drop-out from IPV intervention (DeMaris 1989, Hamberger and Hastings 1989, Gondolf and Foster 1991, Cadsky, Hanson et al. 1996, Gerlock 2001, Chang and Saunders 2002, Tollefson, Gross et al. 2008). However, other studies have found contradictory findings such as men who completed the IPV programmes were younger (Gerlock 2001, Rooney and Hanson 2001), or no relationship existed between the level of education and programme completion (Gerlock 2001, Buttell and Carney 2002, Carney, Buttell et al. 2006). Therefore, regardless of the demographic factors' roles in predicting IPV intervention commencement or completion, agencies working in the IPV area are better to consider other factors that impact engagement, such as the characteristics of the programme or the practitioners' skill in working with perpetrators.

Past research has found that IPV programmes are more effective if they are completed, and perpetrators who exit a programme before its completion are more likely to re-offend than those who do not attend a programme at all (Morrison and Davenne 2016, Vigurs, Schucan Bird et al. 2016). It is, therefore, essential to reduce IPV programme drop-out rate to ensure positive gains for men, their partners and children, whanau, and the wider community. Although programme completion at SVS was not low (with 81.8% completion rate), still, approximately 18% of clients dropped out of the programme. Further, slightly more than half of the clients at Aviva failed to complete their IPV intervention. The difference in intervention completion between SVS (81.8%) and Aviva (46.2%) may be because most of the clients at SVS were mandated to attend an IPV programme and the consequences of a breach may prompt them to be more willing to complete the intervention. In contrast, all clients at Aviva were non-mandated, and therefore they may have felt less compelled to complete the intervention. In addition, clients at SVS were monitored monthly or weekly, depending on the source of their referral (Family Court or Department of Corrections), which could also contribute to the higher completion rate at SVS compared to Aviva. For example, Barber and Wright (2010) found that increased supervision exercised over the clients by the referral source during IPV intervention increased the likelihood that perpetrators will complete the IPV programme.

Another possible reason for the difference in completion rates found in the current study was the different definition of intervention completion (as described in Chapter 3) between Aviva and SVS. At SVS, the programme was considered complete when the client finished the IPV intervention he was assigned to (with a set number of sessions for all). In contrast, at Aviva, the number of sessions was determined based on individual needs, with completion considered to be when clients have attained the goals that had been set for them. At SVS, clients were considered

to have completed the intervention because they simply attended the required number of sessions, even if they had not achieved the programme objectives. Therefore, although the completion rate was higher at SVS, it could be less if those clients who did not achieve the objectives of the intervention were excluded from the final analysis. It is then recommended that future research evaluates if clients at SVS were able to achieve the objectives of the programme.

In addition, it was possible for the same client to be re-referred to Aviva and SVS because of continued problems with IPV. Accordingly, data at SVS suggested that for a timeframe of 7 months from July 2018-Feb 2019, from 552 referrals (Family Court and Department of Corrections), 51 (9.23%) clients were re-referred to this agency. Those were clients who either did not complete the programme, or those who completed the intervention, but were referred back again due to ongoing issues with IPV. It would be useful for future research to examine the number of re-referrals at IPV agencies only for clients who have been referred again after finishing an IPV programme (to give an idea about the IPV intervention success).

Additionally, it was noted that Māori clients comprised a higher number of clients referred to Aviva and SVS. The statistical analysis in the current study found no statistically significant difference between ethnicity and intervention completion at these agencies. Previous research on the effects of ethnicity on IPV intervention completion is inconsistent (Lauch, Hart et al. 2017), with studies finding ethnicity to be a statistically significant predictor of outcome (e.g., Bennett et al. (2007) and other studies finding that ethnicity was not a statistically significant predictor of intervention effectiveness (Daly and Pelowski 2000).

Further, just because an individual completes IPV intervention does not necessarily mean that they were motivated to attend the intervention. They may have simply attended to comply with their legal conditions. Furthermore, this also does not mean that they were actively engaged

in the intervention (Walters 2010) and may not have made any changes to their violent behaviour. To understand the real impact of the intervention on the IPV, follow up studies should be conducted to analyse recidivism six months or a year after the intervention was completed. Finally, while some clients at SVS and all clients at Aviva were not mandated by the court or any other agencies to attend the programme, they may still feel compelled to seek treatment by their partner or families in an attempt to avoid negative consequences such as losing their children, partners, families, and friends.

In NZ, very little information is available on the success of IPV programmes (Slabber 2012). In a report by Family Violence Clearinghouse in NZ, from 5254 men who referred to IPV programmes in 2005, only 31% attended the assessment, and 20% completed the programme (Clearinghouse 2007). This is inconsistent with the data found at Aviva, with an engagement rate of 52.25% and a completion rate of 46.2%. Further, although the current study does not have any data on the number of individuals who were referred to attend IPV programme at SVS and finally presented at the assessment, the data, however, shows that intervention completion rate was 81.8%, which was higher compared to the data in 2005. Three other NZ studies have looked at the effectiveness of IPV programmes provided by a range of community-based organisations that were funded by the Department of Corrections, the Ministry of Justice and the Ministry of Social Development (Lloyd-Pask and McMaster 1992, McMaster, Maxwell et al. 2000, Hetherington 2009). All three studies used a pre-test-post-test design and found that men were less likely to be violent after completing the programme. While these appear encouraging results, these studies did not use a control group. As such, the ability to attribute the reduction in IPV to the intervention is limited.

Conclusion

The study highlighted that those perpetrators who were mandated to attend IPV intervention at SVS were more likely to commence the IPV programme. The type of referral, however, was not a predictor for completion of the IPV programme as mentioned in previous studies. Additionally, data showed that the intervention completion rate was different between Aviva and SVS; this was attributed to different reasons such as SVS having mandated clients or the different definitions of intervention completion between the two agencies. In addition, data showed that the intervention non-completion rate was 18.2% at SVS and 53.8% at Aviva which due to the high rate of IPV in NZ, is essential that it is addressed. While there is a growing body of research investigating factors that predict drop-out, little research has examined interventions to address the problem of lack of engagement in intervention. There is a need for straightforward methods to increase engagement that can be implemented within agencies providing IPV programmes to reduce drop-out. One possible method is MI which has been found to increase intervention engagement (Baker and Hambridge 2002, Dean, Britt et al. 2016); reduce drop-out (Roberto, José Ramón et al. 2004); and improve outcomes among clients who are reluctant to attend a programme and/or change their behaviour (Lincourt, Kuettel et al. 2002, Lewis-Fernández, Balán et al. 2013, Chlebowy, El-Mallakh et al. 2015). Therefore, it might be a suitable approach in IPV area as well.

Chapter 6 describes an evaluation of MI as a pre-intervention method to increase IPV intervention engagement, which was trialled at Aviva and SVS. First, practitioners at both organisations were trained in MI, with a specific focus on MI for engagement. The level of the MI skill acquired during this training phase was evaluated and was reported in Chapter 5.

CHAPTER 5: TRAINING STUDY

Chapter Overview

This chapter will:

- Review the literature on MI training
- Describe the training study involving Aviva and SVS staff
- Evaluate the outcome of the MI training
- Describe findings from the focus group with regards to their experience of learning and using MI within the IPV context

Introduction

MI Training

Over the past 20 years, the need to train professionals in MI has increased (Schumacher, Madson et al. 2014) as the interest in the application of MI in a variety of settings and across a range of behaviours has grown. One of the most important findings on MI training suggests that self-directed learning through reading books and self-reflection is not an effective strategy for learning MI (Smith, Hohman et al. 2017). Self-paced or informational-only teaching models are better to be combined with longer and more interactive training. Interactive training provides skill-building exercises followed by interactive debriefings (Smith, Hohman et al. 2017). For this reason, MI training is often provided in workshops lasting between 1-3 days (Bennett, Moore et al. 2007, Schumacher, Madson et al. 2014). These workshops usually include an introduction to the spirit and processes of MI, a demonstration of the method, and presentations and opportunities to practice MI skills (Schumacher, Madson et al. 2014). Skills such as open-ended questions, simple and complex reflection, affirmation, and summarising are among the skills emphasised in workshop training. Additionally, the skills of eliciting and responding to change talk are crucial when learning MI.

Studies suggest that workshop training develops MI skills, but that newly acquired skills tend to erode soon after training unless there are ongoing supports and post-training supervision or coaching (Walters, Matson et al. 2005, Martino, Ball et al. 2008, Schwalbe, Oh et al. 2014). For example, Miller, Yahne, Moyers, Martinez, and Pirritano (2004) evaluated five types of training in MI provided to licenced substance abuse professionals (n=140) compromising a clinical workshop only, workshop with feedback, workshop with individual coaching sessions, workshop with both coaching and feedback, and a waiting list control group of self-guided training. They

found that the self-guided training group showed no statistically significant change in their MI skills (p = 0.129), whereas the remaining four groups did show statistically significant improvement in their MI skills. Also, the workshop only group demonstrated only moderate improvements (p = 0.031), whereas the other three groups made considerable improvements (p < 0.001). Additionally, the workshop only group showed an apparent reversal of MI proficiency post-training, such that at 4 months post-workshop, their skills were near to the levels of the untrained waiting list control group. The workshop group was able to demonstrate high levels of MI skill on the day after training; however, it fell below proficiency criteria without further training and support.

Moyers et al. (2008) found similar results to Miller et al. (2004) in their randomised trial investigating the effects of MI training for behavioural health providers (n=129). The results demonstrated that although practitioners showed increased MI skills after workshop training, their skills decreased after 4 months follow up when compared to their performance immediately post-training. The reversal after one-shot workshop training was consistent with long-standing literature on staff training (Stokes and Baer 1977), reporting that those receiving feedback and coaching were more likely to retain proficiency levels post-workshop training. Eroding MI skills post-workshop suggests that ongoing post-workshop supervision and coaching are needed to maintain proficiency, especially for newly trained practitioners. However, while there is strong evidence for extended and multi-component training combined with supervision, in reality, trainees and their managers often prefer brief single-session workshop-based training. The preference is because any time spent in training is time that could not be spent on billable client care activities (Cook, Manzouri et al. 2017).

Miller and Mount (2001) described learning MI in terms of two processes: (a) acquiring preferred MI skills and (b) unlearning previous MI-inconsistent counselling habits. However, it is not clear how unlearning happens through the process of learning MI and who might find this unlearning most difficult (Schumacher, Madson et al. 2014). Martino et al. (2008), in a pilot study (n=26) found that practitioners with greater professional experiences (i.e., older and with more years of working experiences) may require more time to acquire the fundamental skills of MI. The reason could be that these professionals have a more deeply embedded repertoire of MI-inconsistent behaviours compared to less experienced practitioners (Schumacher, Madson et al. 2014). A meta-analysis (n=15) of the effects of MI training on practitioners' behaviour found that in the majority (12 of the 15 studies) of the studies, MI training led to greater skilfulness in MI (de Roten, Zimmermann et al. 2013). Most of the trainings in these studies were comprised of two-day workshops lasting for 12-16 hours. Data from pre- to post-training showed a relatively large effect size in practitioners' behaviour (d = 0.70), and the skills were maintained over a short period (4 weeks-4 months), with an effect size of 0.60. The results also indicated that additional feedback (e.g., coaching or supervision) further improved skills (d = 0.82). Other key findings of de Roten et al.'s (2013) study were that trainees' age did not affect their MI learning, but those with more years of clinical experiences had better training outcomes.

The result was in contrast with the finding of Martino et al. (2008), who found that further experiences of practitioners, hampered their ability to demonstrate skilfulness in MI post-training. Cook et al. (2017) suggested that both younger professionals and older ones can learn MI easily. Younger ones because they are less set in their ways, and more experienced practitioners because they have already used a non-MI style, have had first-hand experience with its limitations, and are ready to try anything new that might help.

Schumacher (2014) conducted a study to explore the barriers to learning MI by asking MI trainers (n=146) about their trainees' MI-inconsistent behaviours, as well as other factors that might affect the outcome of MI training. The trainees were among mental health and substance abuse treatment practitioners and correctional staff. Motivational interviewing inconsistent behaviours (e.g., giving advice without permission, talking too much, confronting or arguing with clients/patients, arguing for change, assuming the expert role, asking too many closed questions, placing the practitioner's goals first, and focusing too early on a problem or solution) were among the most reported behaviours that the trainers considered to be barriers to learning MI. Moreover, the barriers were perceived more in correctional staff than in mental health. The researchers suggested that this might be because of the basic counselling skills of mental health providers that helped them to learn MI more easily. Also, MI might be better suited for those who have a background in counselling and therapy, especially because the training duration for MI workshops is usually short (between 1-3 days).

Additionally, Coke et al. (2017) conducted a study of 10 years (2006 to 2015) of inter-professional workshops on MI to identify trends in trainees' (n=394) MI-related knowledge, attitude, and behaviour. This was a secondary analysis of questionnaire data originally collected for routine evaluation of MI training. All training events in this data set were conducted by a single team at the University of Colorado over the course of 10 years. All workshops included a blend of didactic content, clinical examples, and role-play exercises. Most trainings were eight hours in duration (24 groups), although a small number were only four hours (4 groups). The average training group size was 14 trainees (range 3–39). Trainings were either 1-time events (22 groups) or split over two occasions, 1–3 months apart (6 groups). Some trainees also participated in follow-up ‘‘booster’’ sessions or individual supervision 1–6 months later. The number of participants who

received these booster sessions were not mentioned in the study. They found that trainee's demographics such as age, gender, and race/ethnicity had limited associations with their knowledge, attitude, or behaviour towards MI. However, trainees with more years in practice had slightly more positive attitudes toward MI. Regarding the differences by professional discipline, mental health professionals had the highest score of knowledge and attitude compared to the non-health professionals. Finally, although most of the trainees had received MI training previously (the number of participants with previous MI training was not mentioned in the study), the prior training was not enough to predict better scores on the knowledge–attitude–behaviour (KAB) survey, designed to assess knowledge, attitude, and behaviour consistent with MI principles. However, the researchers did not provide details on the frequency of the participants' practice of MI, and whether they had used MI in their daily practice after the training or not. Additionally, because KAB does not specifically measure MI skills, and so does not provide a measure of the participants' actual skills in MI, these results should be considered with caution.

Given the above, whether MI training results differ by professional group, or years of experience, or based on trainees' demographic characteristics (such as age) remains unclear.

Measurement of MI Skills

It can be challenging for practitioners to reach proficiency in MI and maintain this over time (Dunn, Darnell et al. 2016). When implementing and evaluating MI, it is essential to know whether clients are receiving MI or not (Dunn, Darnell et al. 2016). There are several assessment methods available for evaluating MI skilfulness.

Motivational Interviewing Knowledge and Attitudes Test (MIKAT). This is a relatively simple test of knowledge and attitudes consistent with MI and its spirit (Leffingwell 2006), and therefore, is a useful proxy for evaluating the more theoretical components of training.

Doran, Hohman, and Koutsenok (2011) report that the MIKAT has adequate internal consistency, with a Cronbach's α of 0.84. By administering the questionnaire before and after an MI workshop, a measure of the change in attitudes and knowledge can be obtained. However, the MIKAT does not provide a measure of MI skilfulness.

Helpful Response Questionnaire (HRQ). One of the scales for measuring MI proficiency is the HRQ (Miller, Hedrick et al. 1991), which is an MI skills assessment proxy. Miller et al. (1991) have tested the reliability and internal consistency of HRQ. They found that the reliability coefficient for each item was excellent. Also, test-retest reliability showed an adequate correlation coefficient of 0.45 which was obtained from the 120 individuals being evaluated. Internal consistency of HRQ was also sufficient with Cronbach's α coefficients of 0.92 and 0.89 for pre- and post-training respectively. The HRQ is a six-item questionnaire in which respondents are asked to provide answers to questions such as 'what you would say next' based on a written clinical scenario. The HRQ is an efficient questionnaire and can be scored quite fast; however, it only provides a measure for the skills of reflective listening, which while an important component of MI, does not measure other important MI skills, such as evoking change talk.

Motivational Interviewing Skills Code (MISC). The scale was developed as a measure for evaluating the quality of MI (Moyers, Martin et al. 2003). Through in-session recordings, the MISC assesses MI practice by rating and quantifying both practitioner and client responses. The most recent version (MISC 2.1) consists of three "passes" of analysis of the interaction between the client and the practitioner (Miller, Moyers et al. 2008). When listening to the recording for the first time, the session is played uninterrupted, and the coder completes a set of global scales. The global scores are designed to reflect the coder's overall impression of the practitioner's performance and the client's responses. The coder must assign a number from a seven-point Likert

scale for each of the ratings to characterise the interaction. For the practitioner, the three dimensions of acceptance, empathy, and spirit are rated. Collaboration, evocation, and autonomy are focused on in the rating. The difference between practitioners with high or low MI spirit lies in their demonstration of these characteristics. For clients, a single rating reflecting the period of most self-exploration is completed. Again, made on a seven-point Likert scale, a score is given based on the amount of personally relevant material shared in the session, along with the extent to which feelings, values, perspectives, and perceptions were shared. When listening to the recording a second time, behaviour classifications are completed for all practitioners' utterances. An utterance is defined as a complete thought and is terminated by a new idea or a client response. For the practitioner, each utterance is assigned to one of the following 15 behaviour categories: advise, affirm, confront, direct, emphasise, control, facilitate, giving information, question, raise concern, reflect, reframe, support, structure, and warn. Further descriptions of the behaviour categories are detailed in Miller et al. (2008). Finally, when listening to the recording the third time, the type, intensity, and frequency of the client language are recorded. The first task is to clearly define the target behaviour for change (TBC); understanding the TBC helps define the client utterances as being towards or away from behaviour change.

Of the questions from a given session, the percentage of open-ended questions (%OQ) can be calculated. The same can be done with reflections to find the percentage of complex reflections (%CR). A reflection to question ratio (R: Q) also can be generated. The amount of MI-consistent responses (MI-Con) can be computed by summing the number of responses coded as advice with permission, affirm, emphasise control, open-ended question, reflect, reframe, and support. The same can be done for the MI inconsistent responses (MI-In) by summing the utterances coded as advice without permission, confront, direct, raise a concern without permission, and warn. The

percentages of these responses also can be computed (%MI-Con and %MI-In). Finally, the results of MISC can be used to compute the percentage of client change talk (%CCT).

The reliability of the MISC has been evaluated in several studies (Baer, Rosengren et al. 2004, De Jonge, Schippers et al. 2005, Lord, Can et al. 2015). Madson and Campbell (2006) reported the intra-class correlation coefficients (ICC) of 0.39 for the practitioner's scale, 0.53 for the client's scale, 0.51 for the interaction scale, 0.25 to 0.79 for the global items, and 0 to 1.00 for the behavioural counts. The complexity and associated cost of using the MISC, however, are disadvantages (Moyers, Martin et al. 2005). It takes at least three months of intensive training for coders to code reliably using the MISC. Also, each individual evaluation requires 90-120 minutes, given that there are three passes of 20-minutes segments of the therapy session. Thus, the length of the MISC and the evaluation process means that it is not an efficient measure of MI skill (Lane, Huws-Thomas et al. 2005).

Video Assessment of Simulated Encounters-Revised (VASE-R). Another measure of assessing MI skills is the VASE-R. It is a video-based method, which can be administered in individual or group settings. It was first developed by Rosengren et al. (2005) as the Video Assessment of Simulated Encounters (VASE). The original VASE comprised three clinical vignettes. Each of them had a brief description of the client and the clinical situation. Respondents were required to write short answers in response to the clients' concerns following prompts like 'write a response that you were listening,' 'write a response that you think would be most helpful in this situation.' Each vignette had six of these items and two multiple-choice questions. The original VASE also had seven subscales (i.e., reflective listening, summarising, and rolling with resistance, developing discrepancy, identifying change talk, stage-matched open questions, and

stage of change assessment). Items were scored on a 3-point scale (e.g., 0–2), yielding a VASE total score that ranged from 0 to 48.

This version was revised, resulting in VASE-R. The VASE-R is the same with the exception that two items of subscales (the stages of change assessment and stage-matched open questions) were dropped because of their poor internal reliability and item irregularity (Rosengren, Hartzler et al. 2008). Identifying change talk was also changed to eliciting change talk. Now, the VASE-R has one multiple-choice item instead of two, and the correct responses are from a total of five response options. It also has five subscales, and the instrument consists of six items per vignette and 18 items collectively. Fifteen items retain a free-response format and the current VASE-R yields a full-scale score ranging from 0 to 36. The inter-rater reliability and internal consistency, along with concurrent validity of VASE-R have been tested and established in many studies (Baer, Rosengren et al. 2004, Rosengren, Hartzler et al. 2008, Dear 2014). The findings indicate excellent inter-rater reliability using intra-class correlations for the full-scale score (0.85) and acceptable levels for subscales (0.44 to 0.73) (Rosengren, Hartzler et al. 2008).

Studies indicated that VASE-R could be useful in assessing respondents' MI skills. The research also showed that subscales could discriminate between areas of skill and areas in need of further work (Rosengren, Hartzler et al. 2008). The untrained benchmark and proposed proficiency standard for VASE-R are summarised in (Table 6).

Table 6
Untrained Benchmark and Proposed Proficiency Standard for VASE-R

	Untrained benchmark	Beginning proficiency	Expert proficiency
Full VASE-R (range= 0-36)	18	26	31
Reflective listening (0-8)	5	6	7
Responding to resistance (0-10)	6	8	9
Summarising (0-6)	1	3	5
Eliciting change talk (0-6)	3	4	5
Developing discrepancy (0-6)	3	4	5

While VASE-R has demonstrated sensitivity to the effects of training (Rosengren, Hartzler et al. 2008, Hohman, Doran et al. 2009, Doran, Hohman et al. 2011), it cannot measure actual in session MI behaviour. Therefore, a more comprehensive but labour intensive approach to assessing MI skills is required to review and score audio-taped encounters (Rosengren, Hartzler et al. 2008). For this purpose, the most commonly used measurement is the MITI rating system, of which the latest version is the MITI 4.2.1 (Moyers, Manuel et al. 2014), and it involves coding of audio-recorded encounters (Moyers, Martin et al. 2005).

Motivational Interviewing Treatment Integrity (MITI). The MITI is a reliable and effective method of assessing MI skills, which can be used both for clinical and research purposes (Moyers, Martin et al. 2005). Created initially as a research tool, MITI has been proven useful in clinical settings in which rigor in supervision and evaluation is needed (Manuel and Drapkin 2014). The MITI has several advantages as a fidelity measure, such as counting of particular types of practitioner behaviours (like questions and reflections), which offers greater precision than simply measuring global aspects of practitioner's skill (Moyers, Rowell et al. 2016). Another advantage of the MITI is the rating of the practitioner's expression of empathy, a core characteristic in MI. Further, the MITI has demonstrated acceptable psychometric properties across a variety of research settings (Martino, Ball et al. 2008). The inter-rater reliability for all items in the MITI is

in the good to excellent range (0.65 to 0.98) (Moyers, Rowell et al. 2016). Further, summary measures from the MITI have correlated with client outcomes in the expected direction (McCambridge, Day et al. 2011, Woodin, Sotskovaa et al. 2012, Moyers, Rowell et al. 2016).

The MITI rating system involves the coding of audio-recorded MI conversations (Moyers, Martin et al. 2005). Global ratings comprise the technical component (cultivating change talk and softening sustain talk), and the relational component (partnership and empathy) of MI. Cultivating change talk measures the client's own language in favour of the change and confidence for making that change. Softening sustain talk measures avoidance of focusing on the reasons against changing or on maintaining the status quo. Partnership conveys an understanding that expertise and wisdom about change reside mostly within the client. Empathy tries to understand or make an effort to grasp the client's perspective and experience. The MITI 4.2.1 also includes behaviour counts of giving information, questions, simple reflections, complex reflections, affirmations, seeking collaboration, and emphasising autonomy (MI-consistent behaviours), and confront, persuade, and persuade with permission (MI-inconsistent behaviours). Each global scale is measured on a 5-point Likert scale, while behaviour counts are tallied for each occurrence of MI specified behaviours and summary scores are generated. See (Table 7 and Table 8). The MITI 4.2.1 proposes two levels of competence in MI - "fair" and "good" (Moyers, Martin et al. 2005) (Table 9) the criteria for which were proposed by the developers' expert opinion, rather than from research. It is, therefore, not clear yet which level of MI skilfulness is required for MI to be effective. Most studies, however, have indicated that more MI-consistent skills predict better client outcome (Miller, Benefield et al. 1993, Vader, Walters et al. 2010).

Table 7
MITI 4.2.1 Scores Description

MITI Code	Brief Description
Global	
Cultivating Change Talk (CC)	Encourages the client's language in favour of the change goal and confidence for making that change.
Softening Sustain Talk (SS)	Avoids focusing on the reasons against changing or maintaining the status quo.
Partnership (P)	Conveys an understanding that expertise and wisdom about change reside mostly within the client.
Empathy (E)	Understands or makes an effort to grasp the client's perspective and experience.
Behaviour Counts	
Giving Information (GI)	Gives information, educates, provides feedback, or expresses a professional opinion without persuading, advising, or warning.
Questions (Q)	Questions (open or closed).
Simple Reflection (SR)	SR reflects a client's statement with little or no added meaning or emphasis.
Complex Reflection (CR)	CR reflects a client's statement with added meaning or emphasis.
Affirm (AF)	AF states something positive about the client's strengths, efforts, intentions, or worth.
Emphasise Autonomy (EA)	It highlights a client's sense of control, freedom of choice, personal autonomy, ability, and obligation about change.
Confront (C)	Directly and unambiguously disagreeing, arguing, correcting, shaming, blaming, criticizing, labelling, warning, moralizing, ridiculing, or questioning a client's honesty.
Seek Collaboration (Seek)	Attempts to share power or acknowledge the expertise of a client.
Persuade with Permission (PwP)	Emphasis on collaboration or autonomy support while using direct influence.
Persuasion (Per)	Overt attempts to change a client's opinions, attitudes, or behaviours using tools such as logic, compelling arguments, self-disclosure, facts, biased information, advice, suggestions, tips, opinions, or solutions to problems.
Summary Measures	
Reflection to Question Ratio (R:Q)	Reflections to Questions Ratio= (Total Reflections)/(Total Questions)
Relational	Relational= [(Partnership) + (Empathy)]/2
Technical	Technical= [(Cultivating) + (Softening)]/2
%CR	Percent Complex Reflections= CR/(SR + CR)

Table 8
MI Coding Scale (Global Score)

	Technical						Relational					
Cultivating Change Talk	1	2	3	4	5	**Partnership**	1	2	3	4	5
Softening Sustain Talk	1	2	3	4	5	**Empathy**	1	2	3	4	5

Table 9
Clinical Basic Proficiency Thresholds

	Fair	**Good**
Relational	3.5	4
Technical	3	4
%CR	40%	50%
R:Q	1:1	2:1

While the MITI 4.2.1 is an efficient method for measuring MI skilfulness, it still requires time for coders to be trained to be able to use it reliably. Moyers, Martin, Manuel, Miller, and Ernst (2007) recommended 40 hours of training and bi-weekly participation in group-coding sessions (Persson, Bohman et al. 2016). Another issue with the MITI (as with the MISC) is that it may be difficult to record client sessions because of confidentiality issues, and client willingness to give consent.

Motivational Interviewing Supervision and Training Scale. The MISTS evaluates behavioural counts of skills consistent with MI as well as the quality of the intervention. The quality of the intervention, MI fidelity, and effectiveness of therapist intervention are evaluated with a 16-item global scale. The overall generalisability coefficient is found to be 0.79 and is considered excellent (Madson, Campbell et al. 2005). The MISTS has been found to be appropriate for use in training, supervision, and research settings; however, the researchers suggested that the reliability and validity of the instrument should be further evaluated (Madson, Campbell et al.

2005). In addition, they advised that the instrument needs to be validated for use in samples and settings other than those related to the treatment of substance abuse.

One Pass Scale. Developed by (McMaster and Resnicow 2015), this is another user-friendly MI fidelity assessment and supervision tool that can be easily adapted to different clinical contexts as it includes several 'if applicable' items that may be omitted if not included in the encounter being coded. The One Pass requires raters to listen to a clinical encounter only once before providing the one-sheet feedback. Using 23 questions assessed on a 7-point scale, the One Pass uses language that can be easily understood by non-MI practitioners; each item is framed as a simple question from the stem 'how effectively did the practitioner...' Whole questions include 'how effectively did the practitioner set the session agenda?', 'elicit importance,' 'elicit confidence' and 'provide a menu of options' (for a full list see McMaster & Rensnicow, (2015). The researchers believed that these simple items would connect with newly trained practitioners. An additional benefit of One Pass is that it requires less coding training.

McMaster and Rensnicow (2015) reported inter-rater reliability for One Pass from –0.195 to 0.99, and kappa for the overall mean, incorporating all items was 0.82, which is excellent (Landis and Koch 1977). Correlations between the One Pass and the MITI, however, is moderate (McMaster and Resnicow 2015). The disadvantage of One Pass compared to MITI is that it only includes impressionistic ratings rather than counts of particular MI-consistent behaviours. Also, rather than computing ratios of open to closed questions and simple to complex reflections (core skills in MI) based on these counts, the rater provides a subjective classification of ratios achieved.

The aim of the current study was to analyse the effectiveness of MI training in developing MI skills of practitioners at Aviva and SVS. The other aim was for these practitioners to receive training in MI in preparation for the final study, an evaluation of the effectiveness of MI for

intervention engagement among male perpetrators of IPV (discussed in chapter 6). The current study aimed to answer the research question 2 “Will practitioners who receive MI training demonstrate increased skilfulness in their knowledge and skills to apply MI?” It was hypothesised that practitioners who receive MI training would demonstrate increased skilfulness in their knowledge and skills to apply MI. Considering the research questions, the VASE-R and the MITI 4.2.1 were chosen to provide a measure of MI skilfulness for the current study. VASE-R is helpful for researchers to determine individual MI skills and to ascertain if priori skill targets were met before permitting an MI practitioner to begin providing MI for a treatment trial. In the current study, VASE-R NZ (Hall McMaster & Associates Limited, 2012), which is an NZ version of the VASE-R was administered. This version is essentially the same as VASE-R, except with wording consistent with the language used in an NZ context, and the use of NZ actors with NZ accents. To measure in session MI behaviour, the MITI and the MISC have mostly been used in MI training studies (Schoener, Madeja et al. 2006, Moyers, Manuel et al. 2008, Barwick, Bennett et al. 2012, Moyers, Manuel et al. 2014, Schwalbe, Oh et al. 2014, Schmidt, Andersen et al. 2019). The MITI was chosen over the MISC for use in the current study as it is a less comprehensive coding system than MISC (Petrova 2011). Further, the MITI requires only one pass while the MISC has three passes. This decreases the complexity and cost, as well as improving the inter-rater reliability.

Method

Participants

Practitioners at Aviva and SVS (SVS n=6, Aviva n=4) who provide the initial contact with men referred via the ISR or other sources of referrals (including self-referral, Family court, and Department of Corrections) for IPV intervention were recruited into the study. After meeting with clinical leaders at both agencies, an email containing information about the MI training was sent

out to practitioners, and those who were interested in participating entered the study voluntarily. Details of the practitioners' characteristics and experience in MI before training are presented in (Table 10).

Staff who participated in the MI training were four men and six women, aged 29-65 years (M = 48.30). They reported a mean of 13.20 (SD = 8.52) years of experience in counselling and social work and a mean of 10.5 (SD = 7.16) years of experience with IPV specifically. Twenty percent had master-level education, 50% had a bachelor level education, and 30% reported no university education. Appendix B includes the information sheet and consent form given to practitioners before initiating the workshop training.

Table 10
Characteristics and Experiences of Practitioners in MI Workshop Training

Characteristics	**N=10**
Gender	
%Female	60
%Male	40
Age	
Min	29
Max	65
Mean	48.30
Ethnicity	
%NZ	50
%Other	50
Education	
%Master	20
%Bachelor	50
%Less than Bachelor	30
Years of Experiences in counselling and social work	
M	13.20
SD	8.52
Years of Experiences in IPV	
M	10.5
SD	7.16
Experience of MI	
%Novice	60
%Some MI training	40

Measures

Video Assessment of Simulated Encounters Revised-New Zealand. Pre- and post-training the staff attending the MI training were administered the VASE-R NZ. The VASE-R NZ was coded by the first researcher. She was first trained in rating the scale by the primary supervisor of this thesis, who is a member of the Motivational Interviewing Network of Trainers (MINT), an international collective of MI trainers who promote excellence in MI training, research practice and implementation. The training involved each person independently rating VASE-R NZ practice examples, and any differences in scores were discussed (this involved coding three samples of VASE-R and the inter-rater reliability was 80%). Inter-rater reliability was calculated using percent agreement. The percent agreement statistic is easily calculated and directly interpretable. Its key limitation is that it does not consider the possibility that raters may guess scores. It thus may overestimate the true agreement among raters. However, if raters are well trained and little guessing is likely to exist, researchers may safely rely on percent agreement to determine inter-rater reliability (McHugh 2012).

Motivational Interviewing Treatment Integrity 4.2.1. Participants were also invited to submit two recordings of MI sessions with their clients post-training. This was not random, and practitioners chose the audio-recording for submission. Each recording was evaluated using the MITI 4.2.1, with written feedback provided individually to each participant by the main supervisor to provide another measure of MI skilfulness. Researchers did not double code the MITI 4.2.1 for the study. The main supervisor, however, is trained in MITI coding and regularly double codes the scale with another member of MINT with high reliability. The VASE-R NZ and treatment integrity data served as the primary outcome measures for this part of the study. In addition, a focus group was held with the Aviva and SVS staff who attended the MI training. The focus group was

conducted to explore the practitioners' experiences of MI after they have been trained in MI and had the opportunity to utilise it with their clients (explained below).

Procedure

Motivational Interviewing training. Two-day MI training workshops, each lasting for 7 hours, were conducted and facilitated by a member of MINT. The workshops were held in Christchurch, New Zealand. In preparation for the workshops, the participants were asked to complete online training on the British Medical Journal website (http://learning.bmj.com/learning/module-intro/.html?moduleId=10051582) and to read an article (10 things that MI is not) by Miller and Rollnick (2009). The aim of the workshop was for participants to learn the basic style of MI and how to continue learning it in practice. The first day included a broad overview of MI, such as MI's spirit, principles, research evidence of its efficacy, the skills of OARS and the concepts of change talk, sustain talk, and ambivalence. The workshops comprised video-recorded demonstrations, didactic teaching, modelling and both real-play and role-playing with feedback. The focus of the second day was to practice and enhance MI skills. Multiple opportunities were provided throughout the workshop for participants to practice and receive feedback on MI skills. Participants were given feedback and necessary materials including samples of MI with resistant clients and guidance on how to increase their ability in eliciting change talk. From 10 participants (Aviva n=4, SVS n=6) who attended the workshop training, 7 of them (Aviva n=4, SVS n=3) completed the workshop and completed the VASE-R NZ pre- and post-training. Out of seven participants who completed the workshop only two practitioners submitted their audio recordings for feedback and coding with MITI.

In addition to the workshop, three further MI training sessions (each of two hours duration) were provided starting one month after the workshop and lasted for two months, and were attended

by three practitioners at SVS. One of these practitioners had completed the workshop training, the other one attended half-day for each day of the workshop training, and the third one had not participated in the workshop, but was willing to be involved in the study (the reason for adding the last two practitioners to the study is explained below). In these MI refresher sessions, specific problems and challenges in applying MI were identified by the trainer, and the sessions followed by role modelling and practicing the technical components of MI, with a focus on evoking and strengthening change talk. Participants at Aviva reported that they did not need the MI refresher sessions, as they had practiced MI together post the workshop training and felt able to provide the MI recordings to receive feedback.

After six months following the workshop, only 2 participants at Aviva submitted their audio-recordings of MI and none at SVS (Figure 7). One of the practitioners at SVS who had completed the workshop was responsible for providing individual programmes to clients and was not providing the initial sessions like the rest of the practitioners, and as a result s/he was unable to provide MI for engagement as planned for the study. The reasons for not submitting audio-recordings for the rest of the practitioners included workloads, change in job role, lack of time, a problem with technology, and lack of confidence in using MI. These reasons are clarified in more detail in the focus group results discussed below. Thus, two other participants were added to the study from SVS to increase the number of participants for the outcome study (Chapter 6). One of those added participants had attended a half-day for each day of the workshop training but did not complete the VASE-R NZ coding. This practitioner received two sessions of MI refresher sessions. The other practitioner had not completed the VASE-R NZ coding and did not attend the MI workshop training. S/he stated that s/he has completed MI training in the past, and given that s/he did not attend the workshop training, s/he received three sessions of MI refresher by the same

MINT member who delivered the workshop to ensure his/her fidelity to the principle of MI as required by the principles of study. This practitioner was 65 years old, had a master's degree, and had 12 years of experience in the IPV area. Ultimately, four participants (Aviva n=2, SVS n=2) provided their MI recordings for feedback. Each practitioner received individual feedback on their audio-recordings upon the submission of their recorded sessions.

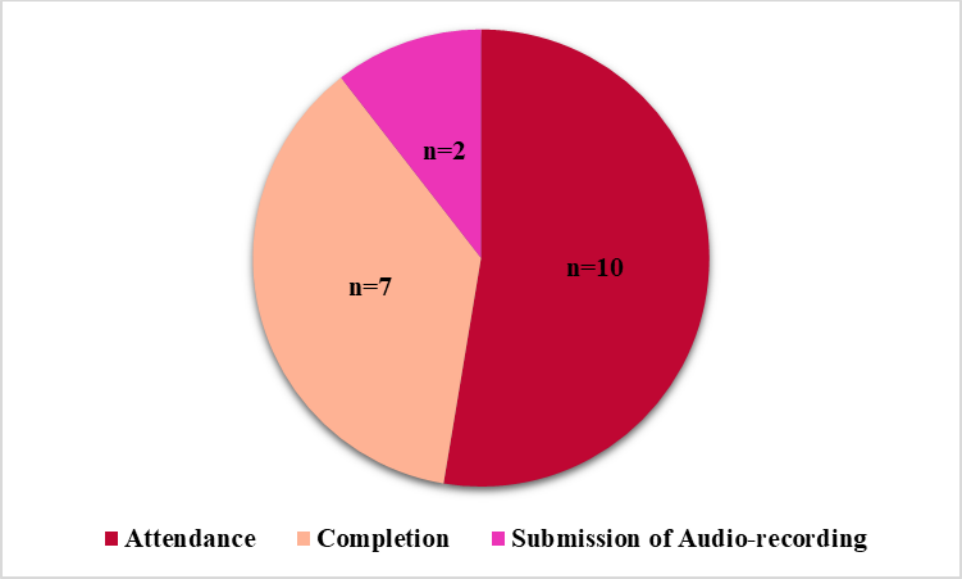

Figure 7. Comparison between Attendance, Completion of VASE-R and Submission of Audio-recording for Participants After Attending the Workshop

Analysis

Data were analysed using the SPSS statistical software package version 24. Wilcoxon Signed-Rank test, which is the non-parametrical equivalent of the paired-sample t-test, was used to test for a statistical difference in the VASE-R NZ scores pre- and post-training. Descriptive statistics were used to report the means and standard deviations for global ratings in MITI 4.2.1.

Focus Group

Participants

A focus group with Aviva (n=3) and SVS staff (n=6) was conducted by the principal researcher to explore their experiences of MI after they have been trained in MI and had the opportunity to utilise it with clients. The rationale for using focus group was based on its potential for enabling participants to construct and argue their views on an issue. A sample of focus group questions can be found in Appendix C.

Measures

Focus group questions were developed based on the themes identified from the discussions between the principal researcher and the practitioners while conducting the study and providing feedback for using MI. It consisted of 14 core discussion points, each containing between one and four sub-questions to be used when further exploration of a topic area was required. For instance, in one question, "when asked about benefits of MI, most practitioners reported that MI is great to increase the motivation of their clients; and the sub-questions following this was: "what is your understanding of motivation and why is it important?" Each group was audio-recorded using a digital voice recorder; and responses were later transcribed. It was anticipated that the focus groups would take approximately one hour to complete.

Procedure

A total of three focus groups were conducted in July 2018 at Aviva and SVS in Christchurch. The first focus group was held at Aviva (n=3), and the second and third one at SVS (n=2, n=4). Upon arrival, participants were formally welcomed and presented with an information sheet (Appendix D) and consent form (Appendix E) to be completed before the groups' commencement. Further, the main researcher explained how focus groups tend to function, noting the importance of there being no 'right or wrong' conversations or ideas, and indeed that people were encouraged to raise and discuss many different ideas and opinions, along with guidelines such as endeavouring not to interrupt each other. Participants were also reminded that the interview would be audio recorded, and their responses will be transcribed at a later date. They were then given an opportunity to ask questions and express any concerns regarding the research. Once all participants were satisfied with the research process, the audio-recorder was turned on, and the focus group commenced. The 14 discussion points were presented in a semi-structured interview

style to allow for discussion outside of these core areas and acted as a general framework for the focus groups as opposed to a structured interview format. Following the completion of each focus group, participants were thanked for their time.

The audio-recording from each focus group was transcribed orthographically, with all spoken words and sounds reproduced; including false starts, hesitation, and cut-offs in speech. Question marks were used to indicate reported speech, and single quotation marks were used to indicate reported thoughts. Interruptions and off-topic conversations were not included in the transcript. In an attempt to protect the confidentiality of practitioners, no identifying information was recorded, with practitioners instead assigned a number (e.g., practitioner 1=P1, practitioner 2=P2).

Analysis

The focus group transcripts were analysed using the six-phase approach to Thematic Analysis (TA) as outlined by (Braun and Clarke 2006). Then, data were processed using NVivo software version 11.

Phase 1. Familiarising with the data: involved reading and re-reading the focus group transcripts, making notes on any items of potential interest to the research aims.

Phase 2. Generating initial codes: involved working through the data and assigning codes to all potentially relevant data excerpts. Codes were generated and modified when needed, to incorporate new material.

Phase 3. Searching for themes: employed both deductive and inductive approaches of TA, whereby the resulting themes were derived from the results of the data of the focus groups. In this phase, codes were sorted into potential themes, with the relevant coded data collated within each theme.

Phase 4. Reviewing potential themes: required a review of initial themes about the entire data set. Each theme was checked against the collated data extracts and codes, with those that did not fit renamed, moved, or recoded accordingly.

Phase 5. Defining and naming themes: involved a thorough analytic evaluation of each theme to determine the core issues they encompassed. Once defined, each theme and extract were compared within and between themes to ensure their succinctness and relevancy.

Phase 6. Data extracts were then reviewed and selected to illustrate each theme and they were presented in the final report.

Results

Video Assessment of Simulated Encounters-Revised New Zealand

As per (Table 11) the inter-rater agreement between the principal researcher and main supervisor for coding VASE-R NZ was 77%, which according to Mchugh (2012), an agreement of 75% and more is good.

Table 11
Calculation of Percent Agreement

Variable	Raters		Differences
	Eileen	Sara	
1	2	2	0
2	2	2	0
3	2	2	0
4	1	1	0
5	0	0	0
6	1	1	0
7	1	2	1
8	2	2	0
9	2	2	0
10	1	2	1
11	1	2	1
12	2	2	0
13	2	2	0
14	2	2	0
15	2	2	0
16	0	1	1
17	1	1	0
18	0	0	0
Number of Zeros	14		
Number of Items	18		
Percent Agreement	77%		

The standard deviation, *p*-value across time-points for the practitioners, and minimum and maximum of the VASE-R-NZ full scale and its subscales pre- and post-training are outlined in (Table 12). The practitioners' full score on the VASE-R-NZ showed a statistically significant ($p < 0.02$) increase from pre- (19.14) to post-training (27.14). However, none of the subscales, except for responding to resistance ($p < 0.018$), showed a statically significant increase from pre- (4.14) to post-training (8.42).

Additionally, 71.4% of practitioners were at an untrained benchmark, and 28.6% were at the beginning proficiency level before the training. After the workshop, only 14.3% of practitioners were still at the untrained benchmark compared to 28.6% who were at the beginning proficiency and 57.1% who had reached an expert proficiency level. The comparison of VASE-R scores pre- and post-training for these practitioners with the standard score is presented in (Figure 8).

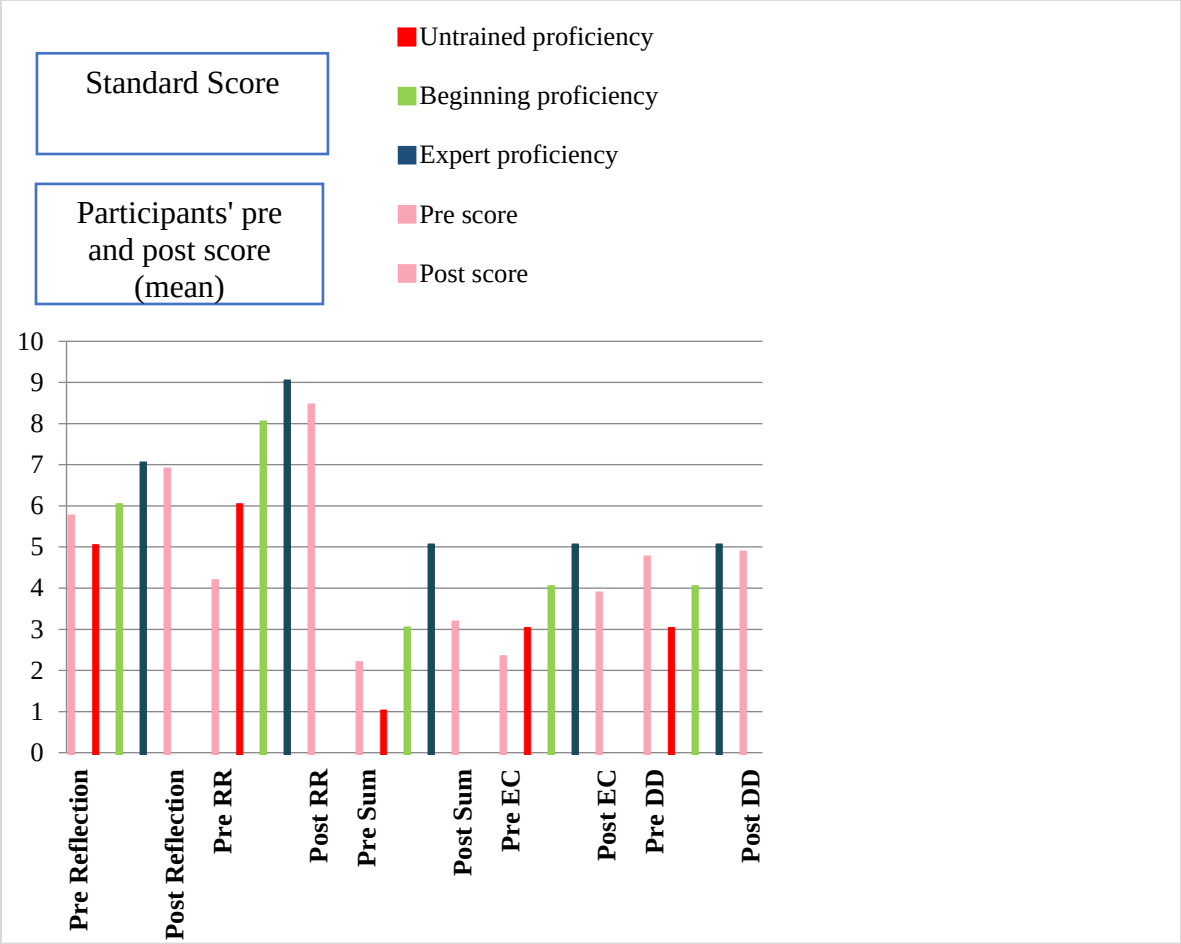

Figure 8. Comparison of Practitioners' Pre and Post Scores and Standard Score for VASE-R

Note: Reflection: Reflective listening, RR: Responding to Resistance, Sum: Summarising, EC: Eliciting Change Talk, DD: Developing Discrepancy

Table 12

Full VASE-R NZ Score for Practitioners Who Completed the Workshop Training (n=7)

	Minimum	Maximum	Std. Deviation	Mean	Sig. (2-tailed)
pre-full score	14	24	3.93	19.14	0.027*
post full score	18	31	5.20	27.14	
Pre Reflective Listening	1	8	2.42	5.71	0.28
Post Reflective Listening	5	8	1.21	6.85	
Pre Responding to Resistance	1	7	2.19	4.14	0.018*
Post Responding to Resistance	6	10	1.39	8.42	
Pre Summarizing	0	3	1.21	2.14	0.08
Post Summarizing	2	4	0.69	3.14	
Pre Eliciting Change Talk	0	4	1.25	2.28	0.07
Post Eliciting Change Talk	1	6	1.95	3.85	
Pre Developing Discrepancy	4	6	0.95	4.71	0.71
Post Developing Discrepancy	0	6	2.26	4.85	

Motivational Interviewing Treatment Integrity 4.2.1

The results of the practitioners' MITI ratings are presented in (Table 13) Descriptive statistics (means and standard deviation) were derived for the global ratings and are shown in (Table 14). A chi-square test of homogeneity was conducted to test if there were any differences between the practitioners' demographic factors, such as age and social work experiences, and the submission of audio-recording. No statistically significant differences were found between these variables. See (Figure 9 and Figure 10).

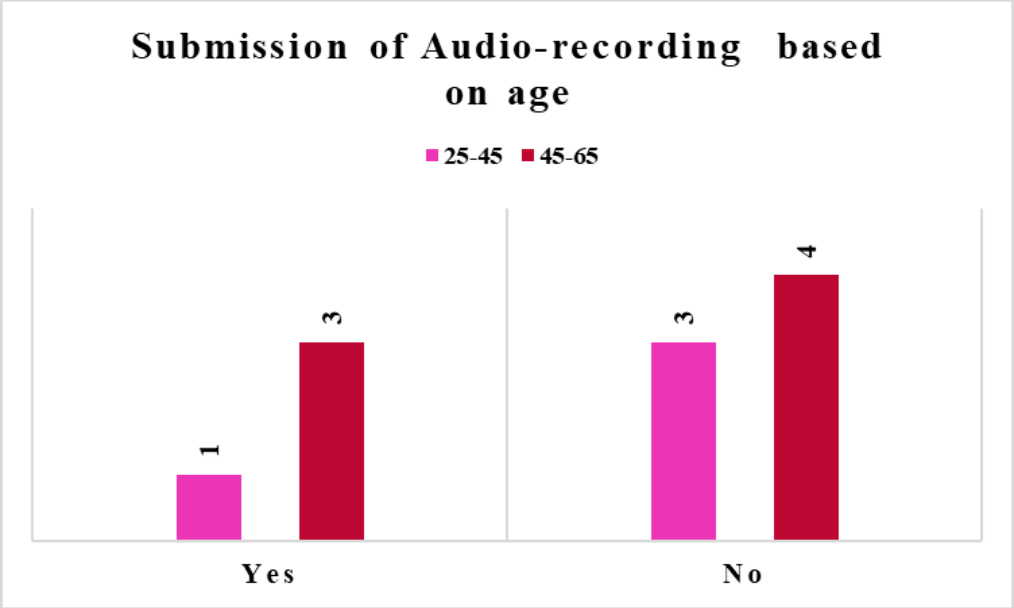

Figure 9. Differences between Submission of Audio-Recordings and Age of Practitioners (Workshop Attendees and Those Who Were Added to the Study after the Workshop)

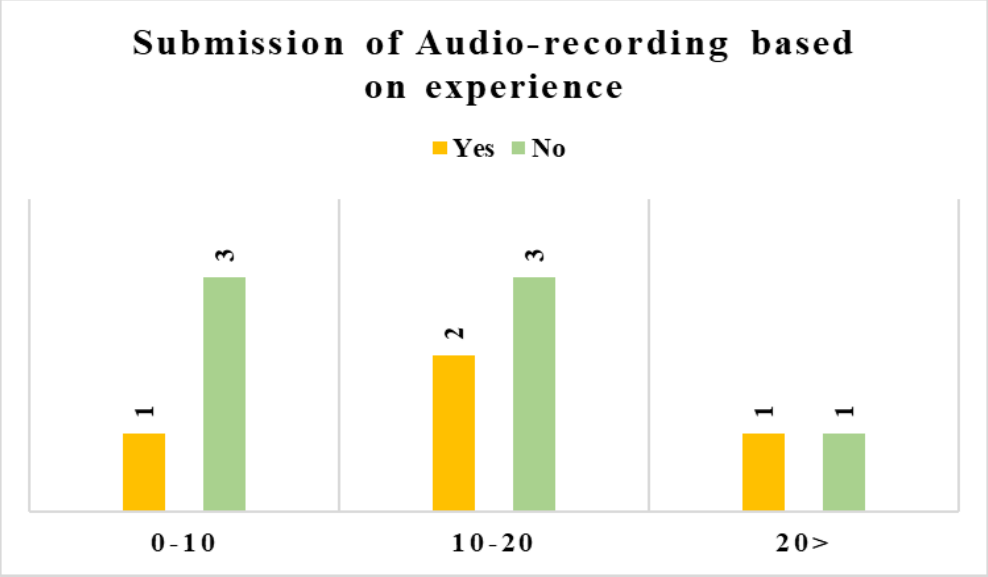

Figure 10. Differences between Submission of Audio-Recordings and Experience of Practitioners (Workshop Attendees and Those Who Were Added after the Workshop)

Based on the descriptive statistics for the MI behaviour counts (Table 14), the mean R: Q ratio was 1.21 (*SD* = 0.52), which is at the fair level of proficiency. More specifically, three out of four practitioners in their first audio and all of them in their second audio reached a fair level of proficiency in MI for R: Q, which means that they were able to make reflection at least as much as they asked questions. The mean score for the %CR was 62.37 (*SD* = 19.42), which met the criteria for a good level of proficiency in MI. A total of three out of four practitioners reached a good level of proficiency in the %CR in their first audio, which remained unchanged at the second audio. This suggests that the majority of reflections made were complex, meaning that practitioners were demonstrating skilful reflective listening and were able to express a deeper understanding of their clients' speech.

The mean score for the technical and relational skills was 3.37 (*SD* = 0.82) and 3.49 (*SD* = 1.08), respectively. A total of three out of four of practitioners demonstrated a fair level of proficiency in their first audio for technical skills, but one participant did not reach proficiency for the technical aspect of MI at the first audio (the same practitioner who achieved a fair level of competency for R: Q). At the second audio, half of the practitioners reached a good level of proficiency, and one had a fair level of proficiency. However, still, one practitioner did not meet proficiency (the same practitioner previously mentioned) in the second audio. This means that this practitioner was not able to attend to the technical aspect of MI that involved evoking and strengthening change talk. For relational skills, half of the practitioners reached a good level of proficiency in both audios, suggesting that they were demonstrating the spirit of MI. However, for both audios, the same practitioner did not reach a fair level of proficiency.

Table 13
MITI 4.2.1 Results for Audio 1 and 2

Practitioners	Technical Skills	Relational Skills	R: Q ratio	CR: SR ratio
1 (first audio)	3.5	4.5	1.87:1	80%
1 (2nd audio)	4	4.5	1.85:1	76%
2 (first audio)	3	4	1.21:1	89%
2 (2nd audio)	4	4	1:1	70%
3 (first audio)	2	2.5	0.3:1	40%
3 (2nd audio)	2	1.5	1.5:1	44%
4 (first audio)	3.5	3.5	1:1	50%
4 (2nd audio)	3.5	3.5	1:1	50%

Table 14
Descriptive Statistics for Behaviour Counts

Behaviour Counts (n =4)	Mean	Standard Deviation	% Does Not Meet Threshold First Audio	% Fair Level of Proficiency First audio	Good Level of Proficiency First audio	% Does not Meet Threshold Second Audio	% Fair Level of Proficiency Second Audio	% Good Level of Proficiency Second Audio
Reflection to Question Ratio (R:Q)	1.21	0.52	25	75	0	0	100	0
Percent Complex Reflections (%CR)	62.37	19.42	0	25	75	0	25	75
Technical Skills	3.37	0.82	25	75	0	25	25	50
Relational Skills	3.49	1.08	25	25	50	25	25	50

In summary, the MITI 4.2.1 ratings of the audios suggested that practitioners who submitted the recordings were mostly able to avoid MI non-adherent behaviour and demonstrated at least a fair level of proficiency in MI. Three of the practitioners demonstrated at least a fair level of proficiency in MI in both audios, while one, although showing some improvement (in R: Q) in the second audio, generally did not meet any level of proficiency in both audios. Further, it was noted that from a coding perspective, while one practitioner achieved scores indicative of a fair level of MI, it was because there was not any sustain talk in the session as the sessions were with a client who had made changes and was not expressing ambivalence.

Focus Group Results

Gathering initial codes resulted in a total of 26 codes (Table 15). An example of a coded data extract is presented in (Table 16). After sorting the codes into potential themes with the relevant coded data collated within each theme, a total of six main themes were identified that are outlined in the thematic map presented in (Figure 11). Then, each theme was checked against the collated data extracts and codes, with those that did not fit renamed, moved, or recoded accordingly. A final set of five themes thought to capture all aspects discussed within the focus groups and is presented in (Figure 12).

Table 15

Initial Code

Initial codes	Sources	References
The workshop was interactive and helpful	2	5
The workshop was too complex and fast	1	2
The workshop was academic focused	1	4
A longer period of training is required	1	5
Change in the level of confidence after participation in the workshop	2	5
Teaching MI step by step	1	1
MI for resistant practitioners	1	1
Problem with Technology	2	3
More practice is required for it to becomes natural	3	5
Receiving regular feedback is required	2	4
MI is not natural	1	2
It seems MI wants to say that it is the best	1	1
Preference to use simple parts of MI	1	3
MI is time-consuming	2	3
Changing old habits is difficult	2	2
Eliciting change talk is challenging	2	5
Agency support is needed	2	2
Managing workload was difficult	2	5
Acronyms were difficult to remember	2	5
MI has the components of what practitioners already know	1	4
MI can be used in groups	2	3
MI is non-judgmental	1	2
MI increases the responsibility of clients	2	3
MI increase engagement and motivation	3	35
MI increases the client's autonomy	3	20
MI makes it easier to initiate a conversation	3	28

Note. Sources= Number of transcripts from which extracts were obtained (N=3)

Table 16
Data Extract with a Relevant Code Assigned

Data Extract	Coded for
When I was using MI, it was like I have to keep thinking to know what I have to say or what I have to reflect. Also, it was difficult to come up with appropriate open questions to help with eliciting change talk. I think with more practice I would be able to overcome this problem.	1- Eliciting for change talk is challenging 2- More practice is needed

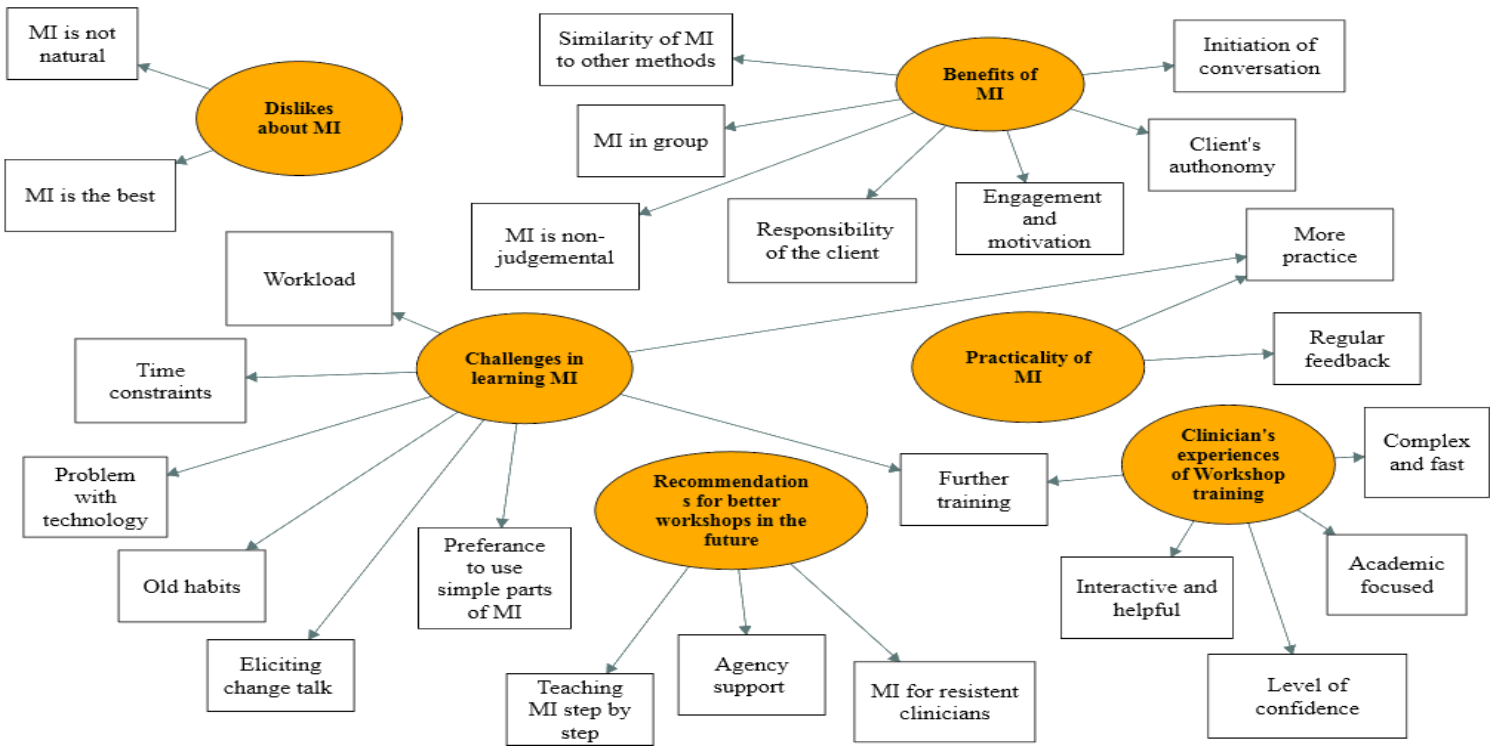

Figure 11. Initial Thematic Map Displaying Six Themes

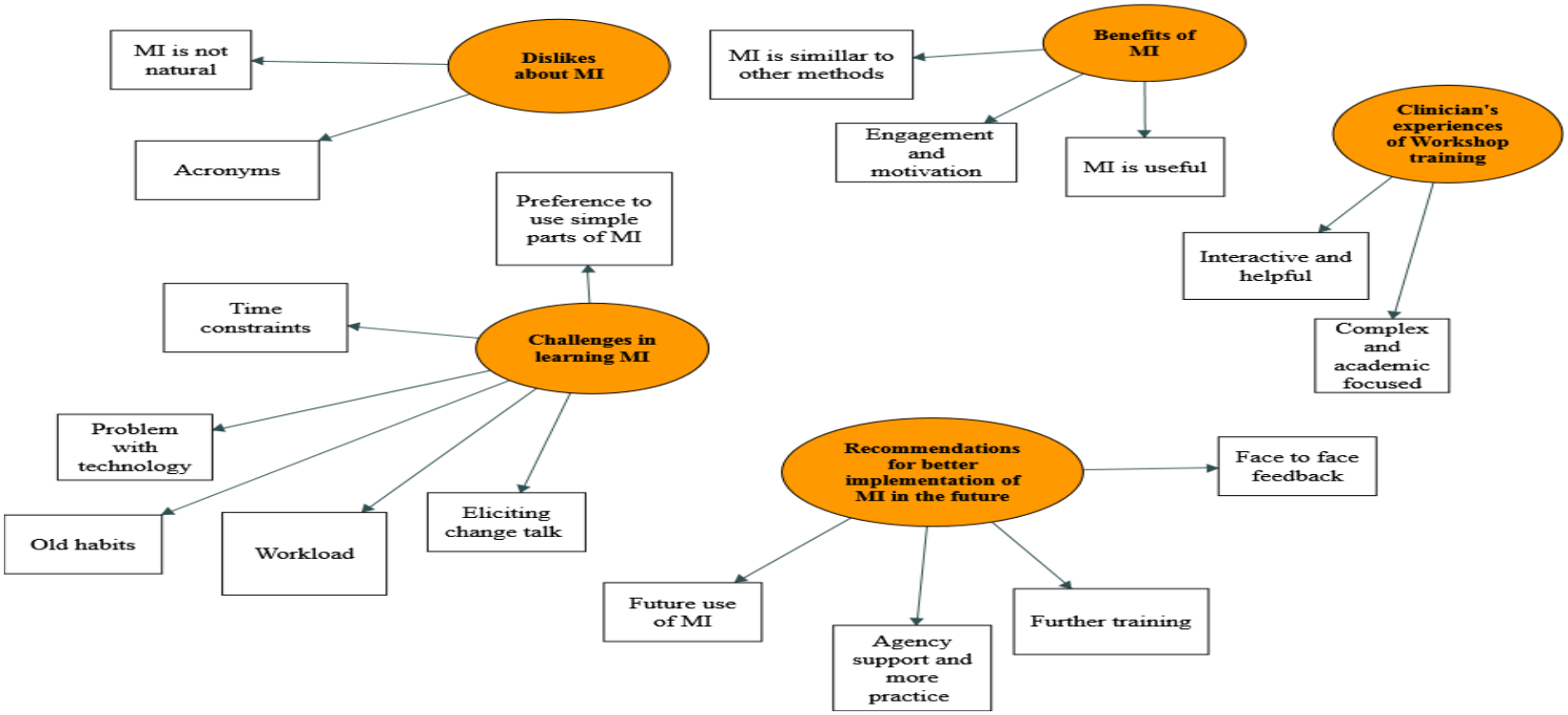

Figure 12. Final Thematic Map Displaying Five Themes

Final Reports

Theme 1: Benefits of MI

> *This population is often told what to do by their family, court, Department of Correction. So most of the time, they are unmotivated and feel resistant. When they find someone who starts listening to them and does not force them to do something they don't want to do, they feel more relax and open up more compared to when we sit there and keep asking questions and direct them to what they should do*. (P2)

> *I think it puts them in a situation to be the experimenter in their life, and I think for many of our clients it helps them experience that and that's a good thing.* (P5)

The theme of 'Benefits of MI within the IPV setting' exemplifies the perceived advantages of MI. While varied opinions were expressed, most practitioners reported that they considered MI was a helpful addition to their practice with perpetrators. Components such as increasing engagement, making the job of practitioners easier, and increasing the client's autonomy were mentioned in all three focus groups as the most important advantages of MI. In using MI, some practitioners reported that MI helped them to feel more competent in initiating a conversation with their clients, but did not help them to feel more confident in general. Also, MI improved their working relationship with perpetrators.

> *I think for me it isn't that I feel more confident, I think what's more important is to feel more competent. It has helped me obviously to establish a therapeutic relationship with my clients, but I don't think it has helped me to feel more confident.* (P4)

Motivational Interviewing was seen to be particularly useful when first meeting a client, and a few of the practitioners believed that it did not work so well with their existing clients.

I usually try to use it when I first meet with a client. I find it a little bit harder or maybe un-natural to use it once I have developed and built a working relationship with my client to use MI. I think they might think I have changed something about myself and my style has changed, so I don't feel comfortable to use MI with those who I have started the intervention with. (P1)

Motivational interviewing is useful. As indicated above, most practitioners spoke highly of the ability of MI to smooth their conversation with their clients and increase the client's motivation and engagement to stay in the programme. For instance, one practitioner reported that *I think one of the things that I've noticed with MI is that the client does the work as opposed to us as the practitioner. When you have to search for the answers and … MI makes the work of practitioner easier.* (P8). Additionally, MI was seen to be useful in IPV group programmes. *I think it also works in a group as well. You get one guy who uses some change talk and then all of a sudden he becomes a spokesperson for change* (P6)

One of the other benefits of MI was that it was seen as empowering. Also, motivational interviewing's non-confrontational approach was seen to be in stark contrast to the current methods employed in agencies by providing an opportunity for the perpetrators to be heard.

It allows many of them who are stuck in a certain mind-set to see that actually they do have some powers, choices, and options. That they do have some power over their lives, and it gives them an ability to see that more clearly that what could be the positive and negative outcomes of the choices they make, whether they make them consciously or unconsciously. And they see that they've got some power over their choices. (P4)

Most of the practitioners considered this to be an important issue for this population and liked the opportunity that MI created for their clients to have a voice.

Additionally, MI was seen to increase the autonomy of clients. *I think it puts them in a say to be the experimenter in their life, and I think for many of our clients it helps them experience that, and that's a good thing.* (P5)

> *Well, I think it's important for any population, and I guess especially the clients that I'm seeing, the guys who are in prison, they have been told what to do their whole life, so often they wouldn't be given any choices. MI gives clients the right to choose for themselves.* (P4)

Also, one of the practitioners expressed the value of MI in being non-judgemental. *It is not putting them down, doesn't make them feel bad. It's not a judgmental thing. It helps to make a healthy rapport with your client. Help with motivation by being non-judgmental, positive, and helping with eliciting change talk.* (P5)

Motivational interviewing increases motivation and engagement. Most of the practitioners agreed upon the usefulness of MI for increasing engagement and motivation in their clients, and they saw it as one the most important and beneficial aspects of MI.

> *I like the motivation stuff you know. It sits with the client. And it's about how they feel about things, and they are the expert in their own lives, that kind of stuff that sits alongside person-centred, therapeutic mode. And I like it, because motivation is kind of the bottom line, and you are going to get some changes or not depending on the motivation and how you interact with that.* (P7)

> *It's the intentional focus, getting that initial engagement, looking for motivation, looking to see if you can find the change talk, kind of getting them on board with us*. (P9)

One of the practitioners mentioned that s/he was more likely to use MI when his/her client was low in motivation, and using MI helped to increase the motivation and maintain his/her

relationship with the client. *I try to use MI every now and then whenever it applies to increase the engagement of my clients and help the conversation keep going.* (P2)

Motivational interviewing is similar to other methods. The practitioners liked the parts of MI that overlapped with what they already knew and had learnt through their practice, such as listening skills and making reflections.

> *I like the open ended questions which we do in our practice anyway. So that's part of the MI. Also, the fact that we reflect what clients are saying and we do summarise things as well. So that's part of the MI as well. I like the fact that you are working alongside the client rather than dictating what they should be doing. You are actually helping them finding their own solutions, and working with that. And MI helps to do that.* (P9)

> *And I think there is a huge amount of overlap between the skills of MI and the skills of solution focused and person-centred so I wouldn't identify those skills as if they belong to MI.* (P7)

Theme 2: Challenges of Using MI With Perpetrators

> *I think I do it because it is part of the other stuff that I've learnt. Like solution focused and person-centred. I use those parts somehow automatically. However, in terms of eliciting change talk and things specifically related to MI, I find it a little bit more challenging.* (P7)

> *How I look for change talk, and how to support it is the most challenging part for me.* (P5)

Eliciting change talk is difficult. Difficulty with evocative open questions and eliciting change talk were the most mentioned challenges of MI by practitioners.

> *When I was using MI, it was like I have to keep thinking to know what I have to say or what I have to reflect. Also, it was difficult to come up with appropriate open questions to help*

for eliciting of change talk. I think with more practice I would be able to overcome this problem. (P1)

Across all three focus groups, it was evident that practitioners struggled to use open questions and had difficulty understanding the eliciting for change talk components. They all indicated that they needed more training to feel more competent using their MI skills and eliciting of change talk specifically.

Changing old habits. Additionally, practitioners reported that they struggled to use MI because of the old habits that they had developed. *Once you develop bad habits, it is hard to change it.* (P5). Furthermore, practitioners who were comfortable with their current methods of interaction reported MI to be a particularly challenging adjustment. *I've had a look on you-tube. Because I wanted to see different people doing it and a lot of stuff that I've watched comes from the medical arena, and so I struggle then to fit that into what I do*.(P7). For one of the practitioners, the challenges of learning MI skills turned out to become a critical learning point helping him/her to get out of his/her comfort zone and try new perspectives

I think the challenges are the benefit. For me, first, when I got resistant towards it and felt stuck, I tried to work it out. So yea I think the benefits are also the challenges that came with it. Because, it made me more open-minded, trying to think differently, even though it is hard. (P6)

Time constraints. There were also some concerns regarding time constraints. The practitioners reported that they felt hindered by the structured assessment they were required to undertake, which they considered did not allow them to have enough time at the beginning of their assessment to spend with their clients to increase their engagement. The organisations require a

number of tasks to be completed for each client and this takes precedence over intervention sessions.

> *What I struggle with is time. Because I think I have this assessment that I've got to get through and if I don't, somebody is going to look over it. And I'm going to get "please explain" notes, so I'm really conscious that I don't want to spend that time in the beginning. But you do that, and you find that it paces that in the ends.* (P7)

These comments highlight the pressures of time within IPV services and how these constraints can impact on the implementation of MI.

Problem with technology. Some of the practitioners, who did not submit their audio-recordings, reported that the technology was a barrier for them: *Maybe a little problem with Technology. Not sure that I can answer it. I think getting myself organized to make it happen. I had a bit of a hitch in my head about getting these audio-recordings to work.* (P4). *Partly, it was the recording devices. For me 3-4 times I recorded, and it didn't work. I didn't know how to use it. So it is the issues that I have with technologies.* (P6)

Workload. Managing workload seems to be a crucial factor for the practitioners to enable them to use new methods in their practice.

> *For me also it was hard as I was new to MI. Also, I had a change of role when I attended the workshop training. So, I had to learn a couple of things simultaneously which made it harder for me to put more effort and time into learning it…. If I had a smaller workload, I could use MI more often. I think it is better to teach new staff in MI who they have just started their job. Because they don't have much duty yet and can concentrate and focus more on learning a new method.* (P1)

Some other practitioners also mentioned that this was out of their control, and this issue needs to be addressed by their agency and the management system.

> *If we have regular feedback and a smaller workload, we could use MI in our current work situation. However, it is something far out of our hand. It needs the agency to provide that kind of support for their staff. But they are always struggling with money and time.* (P2)

This problem needs to be considered when planning MI training for organisations that, although there might be motivated practitioners willing to learn new ways of working with clients, their workload and time pressures may prevent them from putting the newly acquired skills into practice.

Preference to use simple parts of MI. There was one practitioner who stated that since s/he found eliciting change talk and open evocative questions difficult, s/he reverted to the simple parts of MI that s/he was already familiar with, like listening skills and making reflections. *I think I give myself permission to use what I think it's going to work for me rather than trying to be a great MI interviewer. I use the bits that I feel more comfortable with like listening and reflections.* (P5). *I'm choosing the bits that are going to help me and help to develop the therapeutic alliance, and to help my client to develop a rapport.* (P5). This practitioner also mentioned that s/he consider him/herself a counsellor with some MI skills rather than an MI practitioner.

> *And I'd like when you were giving me the exact feedback that what do I need to work on. When you are pointing it out to me that what you are looking for, help me to recognize, OK. That's where I'm at now. However, in the end, I wouldn't call myself a motivational interviewer; I call myself a practitioner who also uses MI. I want to keep going with that. I can see the value of it, but I would still say that I'm a practitioner who uses MI, I'm not*

an MI expert, and it would always be the same. I think because I cannot reprogram myself. (P5)

Theme 3: Dislikes about MI

My understanding of MI is that the application of it is more about the science behind it, it feels like from people who are into it, it feels like it is their religion, it's like the school of MI, the spirit of MI, process of MI, MI is wonderful, MI solve all the problem, and I remember it was the same EFT, narrative therapy, so I think the way it was presented to me it was like somebody is preaching it to me it doesn't elicit change talk from me, it turns me off. (P6)

Motivational interviewing is not natural. Some practitioners reported that the facilitative guiding style of MI did not come naturally.

To me, it really doesn't feel natural. I feel it is quite forced. And I feel quite awkward doing it, because, my style is very conversational and is relaxed. So, I kind of feel like, there is a structure being placed on that, and it causes a bit of anxiety, a bit of being awkward, and the fear that this person can see that it was really not me and it's a bit up front. And as well I think for me I find the complex reflections hard. I know, however, I need a little more practice. (P8)

It's not against my clinical practice, but it just sounds like a different language to me. (P6)

Acronyms. Some practitioners reported difficulties with the acronyms which were presented to them at the workshop to facilitate their learning. They described difficulty remembering the acronyms during their practice, and that this made them feel uncomfortable implementing MI with their clients, and it affected their ability to use MI naturally.

There are about four different ones, and also one that I can't remember. For me, it's like I have to keep it in my mind that is it OARS or is it RULES. So maybe that's the practice thing. And I know that any well-developed sophisticated tool was not going to be simple. (P4)

Most of the practitioners, however, believed that this was something that would be solved by more practice.

Theme 4: Practitioners Experiences of Workshop Training

I think overall when I think about what I knew about MI before I start the course and after it, it was a great opportunity for me. The workshop style and the way that it was taught were awesome, and it was the best training I ever had since I have started my job here. (P1)

It was a really good workshop. I liked having the opportunity to test myself before the workshop with VASE and again after finishing the training, and it gave me an idea on how I improved. (P2)

The workshop was interactive and helpful. Most practitioners stated that in spite of needing more training and more practice, the workshop was beneficial in helping them to learn about MI and develop their skills in using MI.

*It was good. It was good that we were working in peers in the practice runs, it didn't really matter, and each role was useful. The observer for example that their role was to pick up the skills, and I also liked the role of the guy in the hot seat, trying to come up with the ways that our clients go through it. (*P4)

The workshop was complex and academic-focused. Two practitioners considered the workshop to be complex and academic.

I think the challenge was that you were trying to get a very academically focused way of working with people through a bunch of practitioners relatively quickly, who they are not necessarily academic. I mean when I say academic, that doesn't mean that we are not doing our job well because we are not academic, but it would have been great to have these training over six months or a year slowly to build up the skills. (P7)

I think it was the academic nature of it. Because you are getting your Ph.D., and the person who was with you probably has a Ph.D., and I'm from the Polytechnic, and the reality is that … You know what I mean? (P6)

However, it is important to note that one of these practitioners did not complete the workshop training, and one of them attended only half of both training days. And as a result, they missed out on the practical components of the training.

Theme 5: Recommendations for the Implementation of MI

I would have liked to receive feedback individually. It was even better if there was someone more experienced in MI at the agency who I could go to him/her and ask my questions and receive their feedback face to face and right at the time that I had that difficulty. Receiving written feedback was helpful, but I would have learned better if I had face to face feedback. (P1)

Further training is required. The practitioners frequently reported not feeling confident in their ability to practice MI following the training workshop. *The only problem was not enough training, I assume a longer period of training would have helped me to feel more competent in using MI.* (P4). Also, some practitioners reported feeling overwhelmed in trying a new approach and struggled to give their full attention to their clients in sessions. *I'm thinking in my head 'I want to do MI' and that stops me from actually listening to what my client is saying, and then you listen*

and then you're like 'oops! How do I MI that back? (P4). All practitioners agreed that further training and refreshers would be required for them to feel more confident and competent in using MI.

Agency support and more practice are required. Most of the practitioners stated that more practice would have helped them to become more confident in their ability to use MI, but that more practice was difficult as they did not have enough time due to the work demands.

> *We tried to practice MI together. However, it would have been better to practice it for one hour during the week until we feel more confident which was difficult because of time and caseload. I also had a change in my role which made things even more difficult"* (P1)

Another practitioner mentioned:

> *It was bad timing because we had to deal with funding issues for our agencies, so there were heaps of other things we had to do and it didn't allow me to practice it and use the materials and educational videos to develop my skill more deeply.* (P2)

These comments highlight the challenges of introducing a new way of working in a busy work environment, with high caseloads and changing demands.

Face-to-face feedback. Although all the practitioners who provided MI recordings received feedback via email, some of them believed that face to face feedback would have been more helpful in increasing their confidence. *Receiving written feedback was helpful, but I would have learned better if I had face to face feedback.* (P1)

Future use of MI. Practitioners expressed mixed views from both agencies with regard to their future use of MI. They generally agreed that the systems and structure of agencies would need to change for them to have enough support to learn new methods and practice it regularly.

We can use MI in our current practice situation if we have regular feedback and a less heavy workload. It is something far out of our hand. It needs the agency to provide that kind of support for their staff. But they are always struggling with money and time. (P2).

While most practitioners could see the value of MI, some of them reported that they did not have enough time in their schedules to complete MI on top of required tasks, such as structured assessments. *What I struggle with is time. Because I think I have this assessment that I've got to get through and I have to see about 4 clients a day so I don't want to spend that time in the beginning*. (P7). *We tried to practice MI together. However, it would have been better to practice it for one hour during the week until we feel more confident which was difficult because of time and caseload.* (P1)

Some practitioners expressed a desire and an intention to continue to learn MI. *I need more training and feedback. That's why I am looking at the option of studying it more deeply at the University of Canterbury*. (P2). *I want to keep going with that. I can see the value of it. What I like about it as I said is bringing out the change talk quickly, and help them to take steps for their own lives.* (P5)

Discussion

The results suggested that the MI training produced measurable gains in the MI skills of practitioners working with IPV. Practitioners who attended the workshop training demonstrated an increase in MI skills immediately after finishing the workshop based on the VASE-R NZ results. The full score significantly increased pre-training (19.14) to post-training (27.14). Previous research utilising the VASE-R also saw significant VASE-R increase from pre- to post-MI training (Rosengren, Hartzler et al. 2008, Doran, Hohman et al. 2011, Dear 2014). Dear (2014), in her study, found that VASE-R scores significantly increased pre-training (14.93) to post-training

(19.05). Additionally, practitioners' score in Doran et al.'s (2011) study increased from 17.70 points at pre-training to 22.00 points at post-training. Finally, practitioners in Rosengren et al.'s (2008) study started at 18.21 and reached to 24.13 after training. The findings of the current study indicated that practitioners in the present study performed better than the previous studies, with their score increasing from 19.14 to 27.14 post-training. The reason could be the type of program or the different types of practitioners involved.

With regards to the subscales, none of them except for responding to resistance had a significant increase from pre- to post-training. Further, eliciting change talk and summarising scales showed less progress from pre- to post-training. This was of a concern as eliciting change talk is a core skill in MI. Practitioners were given feedback and extra materials including samples of MI with resistant clients and guidance on how to increase their ability in eliciting change talk. In audio-recordings submitted later in the study, half of the practitioners (2 out of 4) showed a considerable improvement regarding the eliciting change talk (Mean for technical skills=3.37). Difficulty in achieving proficiency in cultivating change talk has been mentioned in other studies (Forsberg, Forsberg et al. 2010). This indicates that the technical component of MI may be more difficult to acquire than the relational component.

The lower scores on summarising, however, may not reflect the ability of practitioners to develop a basic summary. A good summary, as defined based on the VASE-R is a summary that contains both change talk and ambivalence evident in the client's statements. While the inclusion of these elements can be justified as consistent with MI, it may not be the case that both change talk and sustain talk should be included in a summary, especially if the practitioner was aiming to soften sustain talk. A possible change to the VASE-R scoring procedure could be to include either, rather than both, as the criterion for a full credit score (Rosengren, Hartzler et al. 2008).

The MITI 4.2.1 results suggested that there was an improvement in the practitioners' technical skills of MI (including evoking and strengthening change talk) from audio 1 to audio 2, indicating that feedback and further practice facilitated ongoing post-workshop skill development. Miller and Rollnick (2012) recommended that feedback and coaching based on observed practice were essential, and was best to be done through in-session audio-recordings. Workshop training is sufficient to provide foundational exposure to MI and assists basic skill development, but insufficient to produce proficiency for practitioners to enable them to consistently implement MI in their practice (Forsberg, Forsberg et al. 2010). Ongoing training supported by coaching and feedback is the most effective method to achieve proficiency (Hall, Staiger et al. 2016), with many individual competencies requiring upwards of a year to acquire (Doherty, Hall et al. 2000, Forsberg, Forsberg et al. 2010). In the current study, it appeared that ongoing feedback after the workshop was effective in improving practitioners' skills in regard to eliciting change talk, and 2 out of four practitioners had an increase in their skills from audio 1 to audio 2. The addition of coaching and feedback post-workshop plays an important role in the sustainability of MI skills post-workshop, and those who did not have these feedback and coaching sessions did not reach to this proficiency level (Miller, Yahne et al. 2004, Schoener, Madeja et al. 2006).

All of the practitioners in the current study demonstrated at least a fair level of proficiency on reflection to question ratio and the percent complex reflections. Also, 75% (3 out of 4) of them achieved at least a fair level of proficiency in their technical and relational skills. These results indicated that most of the practitioners who submitted audios had a fair level of competency in MI. There was one practitioner though that had scores suggesting a fair level of proficiency in MI but received this score because there was no resistance or sustain talk in the session. The finding suggests that the MITI's technical scale should be interpreted with caution. The impression was

that the practitioner did not fully understand when MI should be used and was weak on the technical aspects of MI while having good empathic listening skills. The reason for this could be that the practitioner did not attend all the workshop training (attended half day for both workshops) and only attended two MI refresher sessions out of three sessions provided. Comments made by the practitioner in the focus group indicated that the participant had difficulty understanding MI as a whole and needed more training in MI over an extended period of time.

Additionally, when interpreting the results of the MITI 4.2.1, it is important to consider the possibility that the MI skills demonstrated in the recorded sessions may have been the practitioners' best practice as they selected the client and session to record and submit for coding. Therefore there is no guarantee that this represents their skills in routine encounters. Ideally, future studies would record as many sessions as possible and then randomly select the audios to be reviewed and coded.

In the present research, there was a high attrition rate for practitioners, so those practitioners who ultimately delivered their audio-recordings post-workshop training were highly motivated to learn MI. The same results may not occur when training practitioners who are less interested in learning this approach.

The difficulty with collecting audio-recordings of clinical sessions with real clients raises questions about the utility of the method for evaluating training in the community-based trials. In the study, the audio-recording devices were user-friendly; however, despite numerous reminders from researchers compliance was poor. This was consistent with other research (Baer, Rosengren et al. 2004, Dear 2014, Wilkinson 2015), and these researchers have suggested a number of possible reasons as to why this may have occurred including time constraints, forgetfulness, staff turnover, and dislike for the MI approach or lack of engagement with the research. There may be

fundamental aspects of clinical activities in the community practice that make the use of data from the client encounters a poor choice as a gold standard for training outcomes (Baer, Rosengren et al. 2004).

In the current study, from the 10 practitioners who attended the workshop, seven of them completed it, and all participants did not attend all sessions. The reason for the problem with attendance was that the practitioners were not given dedicated time to attend the training and were juggling other work commitments. The problem has been observed in other MI research with possible causes identified as time constraints, high workload, and lack of agency support (Berger, Otto-Salaj et al. 2009, Wood, Ager et al. 2011, Dear 2014, Wilkinson 2015). The lack of attendance due to time constraints and high workloads emphasises the importance of organisational support, so that staff needs to be provided with enough time out to attend the training, and they are also required to be allocated the necessary time and resources post-training to practice MI in order to further develop their skills.

The practitioners at SVS had a heavy workload, usually seeing 4-5 clients each day. They were also required to complete a significant amount of paper-work, along with entering data onto an agency system. This meant that practitioners tended to start the assessment (a booklet with 50 pages) that involved asking a lot of questions rather than taking sufficient time to engage in MI for engagement prior to undertaking the assessment. Other reasons given in the current study for not submitting audio-recordings of MI for engagement were the difficulty of using the audio-recording, technology, and not feeling confident enough in MI. The practitioners added that longer training and practicing more often would have helped them to enhance their confidence. Again organisational support seems to be a critical factor for helping staff to practice and develop their newfound skills.

Further research needs to be undertaken to determine what additional measures can be taken to facilitate an increase in MI audio submission, in both research and real-work settings. Possible ways to increase practitioners' engagement in submitting audios could include: allocating time for practice, encouragement and ongoing support from management, as well as the inclusion of MI skill development, and supports within staff performance plans and appraisals (Wilkinson 2015). Furthermore, it is recommended that practitioners' willingness and readiness to engage in the MI skill development process be assessed before training in MI, and any concerns they may have to be subsequently addressed by the organisation.

Conclusion

Practitioners may be able to learn the basic skills of MI, but without comprehensive training, they might not be able to achieve proficiency in MI. Micro-counselling skills are necessary but insufficient to achieve the spirit and technical aspects (focus on change talk) of MI. Mastering deeper level reflections, evoking and strengthening change talk, while softening sustain talk requires training and ongoing practice, feedback and coaching (de Roten, Zimmermann et al. 2013). Also, the level of ''trainability'' of staff in various roles is different (Cook, Manzouri et al. 2017). Some practitioners may have a greater interest in, or receptivity towards, learning MI and training those practitioners who have an interest and willingness to learn MI (i.e., attend training workshops, and provide ongoing audio-recordings) and designating them as the primary deliverers of MI might offer the easiest route for integrating MI into practice (Cook, Manzouri et al. 2017). Also, at an organisational level, it is recommended that IPV settings work with practitioners to support the implementation of MI. Therefore, organisational support, ongoing training, and supervision are required for interventions to be implemented successfully.

The results of the current study demonstrated that MI training (2-day workshop plus post-workshop feedback and coaching) produced measurable gains in the MI skills of practitioners working in IPV. Additionally, these results are consistent with other research on MI training, which advised that practitioners can develop MI-consistent skills post-workshop training, and post-workshop feedback and coaching is recommended to facilitate the transfer of these skills to the workplace and to develop MI skilfulness further. Therefore, due to importance of engagement for IPV perpetrators, IPV intervention providers may consider training their staff in MI to increase engagement. However, the findings of the current study, although suggestive, are preliminary and should be interpreted with caution given the small sample, the diversity of training experience, and inconsistent completion of measures.

CHAPTER 6: OUTCOME STUDY

Chapter Overview

This chapter will:

- Provide a rationale for, and description of core components of the MI for engagement
- Provide an overview of the study design
- Describe the measures, including primary and secondary outcome measures
- Outline the analytical methods used in this study
- Describe the findings of the study
- Discuss the main results of the study

Introduction

As previously mentioned in chapter 2, due to the low uptake of IPV intervention and the high rate of treatment incompletion IPV intervention, it is crucial to consider motivational enhancement either before or early on in IPV programme (Crane and Eckhardt 2013). Study 1 (Chapter 4) found a completion rate of 46.2% at Aviva and 81.8% at SVS. While this does not suggest a high rate of drop-out at SVS, more than half of the clients at Aviva did not complete the intervention. Enhancement of IPV intervention completion rates has also been mentioned as a goal in a study conducted in the Ministry of Justice in NZ (Nicholson 2018). Enhancing engagement in IPV interventions is crucial as those who do not complete IPV programmes are at higher risk of continuing their IPV behaviour (Babcock and Steiner 1999, Rondeau, Brodeur et al. 2001, Gordon and Moriarty 2003, Bennett, Stoops et al. 2007). Also, research has shown that the attrition rate is significantly related to post-offence arrests, and more than twice as many intervention drop-outs (39.7%) than completers (17.9%) were rearrested for a general crime during the 13-month study period (Eckhardt, Holtzworth-Munroe et al. 2008). Additionally, those who dropped-out were three times more likely (8.1%) to be arrested for an assault-related charge versus IPV programme completers (2.8%).

The current study evaluated the effects of MI on increasing engagement and completion of IPV intervention for male perpetrators of IPV. The following questions were explored:

Research Question 3

Will participants receiving MI rate their readiness for engaging in IPV intervention, higher than participants in the control condition?

Hypothesis. Participants who receive MI would rate their readiness to engage in IPV intervention higher than the participants in the control condition.

Research Question 4

Will participants who receive MI commence IPV intervention more than participants in the control condition?

Hypothesis. Participants who receive MI would commence IPV intervention more than the control participants.

Research Question 5

Will participants who receive MI attend a higher mean number of standard IPV sessions than participants in the control condition?

Hypothesis. Participants who receive MI for engagement session would attend a higher number of IPV sessions than the control condition.

Research Question 6

Will participants who receive MI complete IPV intervention more than participants in the control condition?

Hypothesis. Participants who receive MI for engagement session would complete IPV intervention more than the control condition.

Research Question 7

Will participants who receive MI rate the importance of making a change to their IPV behaviour, and their ability and commitment to change this, higher than the control participants?

Hypothesis. Participants who receive MI would rate the importance of making a change to their IPV behaviour, and their ability and commitment to change this, higher than the control participants?

Research Question 8

Will readiness to engage in IPV intervention, the level of importance to make a change in IPV behaviour, and ability and commitment to do so, predict IPV intervention commencement and completion?

Hypothesis. Intervention commencement and completion can be predicted by the level of readiness to engage in IPV intervention, the importance to make a change in IPV behaviour, and ability and commitment to do so.

Method

Participants

The study comprised men who have been referred to attend an IPV intervention programme to Aviva and SVS via the different sources of referrals that each organisation received, including self-referral, ISR, and referrals from other agencies, such as the Department of Corrections and Family Court, (explained in detail in chapter 3). If a client had received MI or IPV intervention previously, they were excluded from the study. This question was asked by practitioners before the participant's allocation to MI or the control condition. No participant was paid or received any reimbursement, for his involvement with the research.

Design

The study utilised a quasi-experimental between-groups design to examine the effectiveness of MI for increasing engagement of male perpetrators. Two groups (control and MI) were compared to each other on the following variables: readiness to attend and IPV intervention, IPV intervention commencement and completion, the number of sessions attended, the importance of changing IPV behaviour, and the ability and commitment to change these behaviours. It was hypothesised that MI condition participants would rate their readiness for attending an IPV

intervention higher than the control condition and that MI for engagement would increase IPV intervention commencement and completion, while also enhancing the number of IPV programme sessions attended as compared to those in the control condition. Furthermore, it was hypothesised that MI participants would rate the importance, ability, and commitment to make a change to their IPV behaviours higher than participants in the control condition.

Pre-Training

For the control condition, a meeting with the staff was held at Aviva and SVS a week before starting the data collection for the control study to explain the project in more detail and to answer any questions the practitioners might have about the study. An email containing information about the research project (the importance of engagement in IPV interventions and the rationale of applying MI as a pre-intervention method to enhance engagement in the IPV programmes as explained in Chapter 2) was sent out to the practitioners before the initial meeting.

Phase 1: Control. All participants underwent an intake assessment conducted by a practitioner upon their referral to Aviva and SVS (time 1). The clients were first provided with an overview of the research, and if he was interested in participating in the research, he was given the information sheet to read (Appendix F). After this, if he was still willing to be involved in the research, he was provided with the consent form to sign (Appendix F). Two questionnaires (the Change Questionnaire and the Readiness Ruler, Appendix G) were given to the participants to be completed (this served as time 1), and the rest of the session followed as the usual assessment process at each agency. At the end of the second session, the participant was asked to complete the questionnaires again (time 2). These sessions were then followed by interventions as usual at Aviva and SVS (as described in Chapter 3). All participants received a programme of 12-16 weekly 2.5-hr sessions, conducted in the group (8-16 individuals) or 6-12 weekly 1-hr sessions in an

individual format. The individual and group programmes at SVS were provided by different practitioners than those who had conducted the assessment. Participants at Aviva, however, received the individualised intervention provided by the same practitioner who they had initially met with.

The control condition consisted of 10 participants in total seen between July-November 2017. Recruitment for this phase started in July 2017 at Aviva and in Oct 2017 at SVS and ended in November 2017 at both agencies.

Phase 2: MI for engagement. The practitioners who were trained in MI (Chapter 5) and had reached at least a fair level of competency in MI and were strong in the technical aspect of it were invited to recruit participants and provide MI for an engagement at this phase (Aviva, n=2, SVS, n=0). Given that, none of the practitioners at SVS achieved an acceptable level of competency in MI, the principal researcher of the current research who was employed by SVS during the course of the project, was added to the study. She had completed a six months course on MI, and to ensure her fidelity to MI; she also provided two audio-recordings like the rest of the participants. Based on the MI 4.2.1 results, she achieved a good level of competency in both the relational and technical aspects of MI. So, three practitioners recruited participants at this phase (Aviva, n=2, SVS, n=1).

Men referred to Aviva and SVS for IPV intervention (from the same source as in phase 1), who agreed to participate in the research (following the same process described above) received two MI for engagement sessions provided by practitioners trained in MI and who had demonstrated at least a fair level of MI skilfulness (Chapter 5). Appendix H includes the information sheet and consent form given to participants in the MI group.

For this phase, the sandwich method (Martino, Ball et al. 2006) for providing MI for engagement was applied, in which the assessment starts with MI for an engagement (time 1), then the conversation shifts to a more formalised assessment when required (i.e., the usual assessment process at Aviva and SVS). After the second assessment session, the second MI for engagement session was provided (time 2). The duration of each MI was 20-40 minutes. The Readiness Ruler and Change Questionnaire were completed by the participants pre- and post-MI for engagement (i.e., time 1 and time 2).

The MI condition consisted of 15 individuals seen between February 2018 and November 2018. Motivational interviewing for engagement was then followed by intervention as usual at Aviva and SVS as described in Chapter 3 and as in phase 1 (the control condition).

All MI sessions were audio-recorded if the client consented to this. Twenty percent of audio-recordings were coded using the MITI 4.2.1, and the practitioners continued to be provided with individual written feedback (as described in Chapter 5). The audios were coded by the MINT member (trainer of the MI workshops in Chapter 5, and as described in Chapter 5).

The MI for engagement was based on the premise that motivation for intervention engagement includes, but is not limited to motivation for change. Explicit attention was paid to participants' hopes, as well as practical and psychological barriers (cost, access to the intervention, time, low energy, anxiety), negative perception of the IPV intervention and past experiences (it doesn't work), cultural attitudes (stigma), and negative relationship experiences (intrusive, manipulative). The key processes of MI were also followed, which comprised engaging the participant in a mutually respectful relationship, focusing on an agenda in a collaborative manner, evoking the participant's intrinsic motivation for attending the IPV intervention, and if ready developing a plan for attending the IPV programme. Consistent with respect for each perpetrator's

autonomy, participants were asked permission before providing information (e.g., regarding the content and logistics of the IPV intervention) and were asked their point of view regarding the information provided. The MI session concluded with a summary of what had been discussed, with a focus on the participant's change talk, and if appropriate, eliciting a commitment to attend IPV intervention. The following protocol, adapted from Dean et al. (2016), was provided to practitioners to use alongside the spirit, processes, and skills of MI:

- ***Participant's story:*** Use reflective listening, affirmations, and support autonomy
- ***Referral*****:** Explore how they have been referred and their feelings about this
- ***Emotional distress:*** Experience of anger/violence – current and past
- ***Context:*** Intimate relationship or family
- ***Ideal functioning:*** Explore hopes, values, interests, and goals
- ***Treatment history and hopes for treatment:*** Past and current efforts at coping, and experience with treatment and concerns and hopes for treatment
- ***Psycho-education about IPV intervention and intervention options***
- ***Use PAPA:*** Permission to discuss, ask what they know, provide information, and ask for a response
- ***Explore barriers to IPV intervention***: Once recognised, use reflective listening, affirmations, and support autonomy
- ***Practical barriers*****:** Such as transport, work, etc.
- ***Psychological barriers:*** Such as beliefs about IPV intervention, stigma, etc.

Measures

Primary outcome measure comprised the Readiness Ruler on which participants rate their readiness to attend IPV intervention on a scale of 0 to 10 in which the lower numbers indicate less

readiness, and the higher numbers indicate greater readiness to attend IPV intervention (Rollnick, Heather et al. 1992). The Readiness Ruler (Rollnick, Morgan et al. 1996) has demonstrated good psychometric properties (Heather, Smailes et al. 2008), and has been found to be a good predictor of intervention adherence (Maher, Wang et al. 2012) and intervention outcome (LaBrie, Quinlan et al. 2005).

Whether IPV intervention was commenced and completed, and the mean number of intervention sessions attended were the other primary outcome measures. Sessions attendance and completion were recorded as part of the usual practice at Aviva and SVS.

Secondary measure comprised self-ratings on the short version of the Change Questionnaire (Miller and Johnson 2008), in which participants have been asked to rate the importance, commitment, and ability to change their IPV behaviour on a scale of 0-10 (0=definitely not,10=definitely). The short version of the Change Questionnaire is a 3 item version of the12 item scale. The 3-item scale has a Cronbach's index of internal consistency ranging from $\acute{\alpha} = 0.39$ to 0.69 and the correlation between the 3-item and 12-item scale scores is $r = 0.902$ ($p < 0.0001$), such that the short scale accounts for 81% of the variance in the longer scale (Miller & Johnson, 2008).

Group data analysis

Analyses were conducted using SPSS version 21. Estimates of means and mean differences are presented with 95% confidence intervals. Hypothesis testing was conducted using an alpha of 0.05 for statistical significance.

Chi-square analysis. The chi-square analysis was conducted to evaluate the IPV intervention commencement and completion differences. For within-group differences, the Wilcoxon Signed-Ranks test was applied. The differences between the average number of sessions

attended by participants in the intervention and control condition were calculated using a Manne-Whitney U test.

Analyse of Covariance (ANCOVA). Data analysis for readiness to attend IPV intervention, and the importance of change, ability, and commitment to change from baseline (time 1) to post-MI/control session (time 2) was conducted using the linear mixed models (ANCOVA) by adjusting for baseline values as covariates. Analysis of covariance (ANCOVA) or repeated measures (RM) models is often used to compare the treatment effect between different arms in pre-post randomised studies (Dimitrov and Rumrill Jr 2003, Wan 2018). An ANCOVA adjusts the baseline score as a covariate in Regression models, while repeated measure treats both the baseline and post-randomisation scores as outcome variables (Dimitrov and Rumrill Jr 2003, Wan 2018). ANCOVA, however, has been shown to be a better match for non-randomised controlled trials (Dimitrov and Rumrill Jr 2003), because it adjusts the post-test means for pre-test differences among intact groups. The study was also interested to know whether groups in terms of the dependent variables were different between the two organisations. For this, the interaction term between group and organisation was entered in the analysis while running ANCOVA.

Binomial logistic regression. Further, the relationship between intervention commencement and completion with the self-report variables (Change Questionnaire and the Readiness Ruler) was explored.

Binomial logistic regression attempts to predict the probability that an observation falls into one of two categories of a dichotomous dependent variable based on one or more independent variables that can be either continuous or categorical (Hilbe 2009). In many ways, binomial logistic regression is similar to linear regression, except the measurement type of the dependent variable (i.e., linear regression uses a continuous dependent variable rather than a dichotomous one) (Hilbe

2009). As with other types of regression, binomial logistic regression can also use interactions between independent variables to predict the dependent variable (Hilbe 2009).

The following model was written for this purpose as below:

Intervention commencement ~ readiness + ability + commitment + group + organization (1|subject) + €

Intervention completion ~ readiness + ability + commitment + group + organization (1|subject) + €

Statistical difference. Inferential Confidence Intervals (ICIs) were also used to establish a modified 95% confidence interval (CI) about each of two means (Tryon 2001). The modified CIs are algebraically equivalent to a null hypothesis statistical test between two means and provide context for expanding on the alternative hypothesis. The ICIs can be used to examine whether two means are equivalent, that is, ICIs provide means for inferring on equivalence in two means rather than only accepting or rejecting the null hypothesis if the means are not different at an alpha level of 0.05 (e.g., such as in ANOVA comparisons). If the ICIs do not overlap; the results are then statistically significant, and the means are different from each other. The statistical difference was calculated for independent groups **(1)** and dependent groups **(2)**.

$$E = \frac{\sqrt{S_{\bar{Y}_1}^2 + S_{\bar{Y}_2}^2}}{S_{\bar{y}_1} + S_{\bar{y}_2}} \quad \textbf{(1)}$$

$$E = \frac{\sqrt{S_{\bar{Y}}^2 + S_{\bar{Y}}^2 - 2r_{12}\, S_{\bar{Y}_1}\, S_{\bar{Y}_2}}}{S_{\bar{Y}_1} + S_{\bar{Y}_2}} \quad \textbf{(2)}$$

Where

$\bar{Y}$= Mean

$S_{\bar{Y}}$= Standard error of mean

r = The correlation between the two data set

The CIs for each mean was calculated with the **(3)**:

$$\bar{Y} \pm E_{\alpha/2} S_{\bar{Y}} = \bar{Y} \pm E\, t_v^{\alpha/2} \frac{s}{\sqrt{N}} \quad \textbf{(3)}$$

Where

S = Standard deviation

$t_v^{\alpha/2}$= The upper 100(1- $\alpha/2$) percentile of the *t* distribution with *v* degrees of freedom and α significance

n = Sample size

Statistical equivalence. Unlike traditional hypothesis testing, equivalence analysis reverses the specification of the null and alternative hypotheses (Stegner, Bostrom et al. 1996). In most statistical testing for significant differences, the null hypothesis says differences among group means are zero (i.e., the means are equal). The alternative hypothesis says the null hypothesis needs to be rejected and that these differences are not zero. In equivalence testing, the null hypothesis states the difference among group means are different, and the alternative hypothesis says the means are equal. In the analysis of differences among groups, this step allows the researcher to estimate whether identified significant differences are meaningful differences. Equivalence analysis also makes it possible to determine whether non-statistically significant differences may be the consequence of small sample sizes and large variability rather than actual equivalence between two programs or systems. Statistical equivalence occurs when the maximum

probable difference estimate (i.e., the upper CI limit of the greater mean minus, the lower CI limit of the lesser mean) fits within an inconsequential difference between the two CIs. The inconsequential difference can be based on a delta (Δ) bound of the maximum difference that can be dismissed on the substantive ground (Tryon 2001). When examining the statistical equivalence in the process, the first step is to specify the maximum allowable difference (Delta) that the researcher is willing to ignore in the name of equivalence purposes. For this study, the allowable difference, Delta, was set as 2.0.

Interpreting statistical difference and statistical equivalence. The ICIs results can be interpreted based on four possible situations (Lakens 2017). The first possible outcome is statistically different and non-equivalent (D/NE), which means there is a difference, sufficient to have substantive relevance. The second case is when the means are statistically different but also equivalent (D/E); it means that there is a difference, but it is trivial. For example, the study could be overpowered. The third scenario is when the means are not different, and they are also equivalent (ND/E); this means the two conditions are indistinguishable. The final situation happens when the means are not different but also not equivalent (ND/NE); this is called statistical indeterminacy. Evidence for or against cannot be drawn in the case of the statistical indeterminacy, and therefore conclusions about results must be suspended until further investigations. One reason for this to happen is that the study is underpowered with a small sample size (Tryon 2001).

Effect size. In addition to the confidence intervals and *p*-values, it was also necessary to report on the 'bigger picture' which includes the effect size (the practical significance) (Fritz, Morris et al. 2012). Considering both statistical and practical significance adds to the information available with which to determine whether the outcome may or may not have occurred by chance. Reporting the size of the effect(s) also allows for the comparison of the outcomes with other

published studies and meta-analyses. The effects that are large but non-significant may suggest further research with greater power, whereas effects that are trivially small but nevertheless significant because of large sample sizes can warn researchers against possibly overvaluing the observed effect. There is a wide array of formulas to calculate an effect size. Due to the small sample size and non-normality of the data distribution, non-parametric effect size for the Mann-Whitney U-test and Wilcoxon Signed-Rank test was used (Fritz, Morris et al. 2012). The effect size (r) for these non-parametric tests can be calculated by dividing the z value by the square root of N. Cohen's (1988) guidelines for r are that a large effect is 0.5, a medium effect is 0.3, and a small effect is 0.1. For ANCOVA, the eta squared effect size was calculated (η^2), and its value was standardised and reported as r value. Finally, the phi coefficient correlation (φ), was calculated from the chi-square test for categorical variables (Fritz, Morris et al. 2012) which its interpretation is the same as r.

Individual Data Analysis

Brinley plots. These are a type of scatter plot developed by Brinley (Brinley 1965) and were prepared in the present research using Sigma Plot version 14 to analyse the self-report data at an individual level. Intervention outcome studies typically involve participants sharing a common problem who are repeatedly observed, normally at time 1 before therapy and then again later at time 2 after the intervention (Blampied 2017). The time 1 score is normally assigned to the x-axis and the time 2 score to the y-axis. If there is no change of score values from time 1 to time 2, and if the axes have the same origin and scale, all data points will lie on or close to 45º. Participants can be divided into control as well as intervention groups, and the dependent variable can be measured repeatedly for all participants in baseline and during and after the intervention. This provides a matrix (or Brinley plot) of repeated measures of one or more dependent variables

for each individual participant. Movement of the points either below or above the diagonal line shows improvement or deterioration of the individual participant. This modified Brinley plot is similar to what Brinley (1965) first introduced in which therapeutic effects were determined based on the data deviations from 45º. However, it is different from Brinley's original in that individual rather than group mean data are displayed (Blampied 2017).

Reliable Change Index (RCI). Changes in an individual participant's Change Questionnaire data were examined using the RCI (Jacobson and Truax 1991). The RCI determines whether any changes are clinically significant, that is, the RCI determines if a change in score was due to a real change or a chance variation (Jacobson and Truax 1991, Zahra and Hedge 2010). The RCI is estimated by calculating the difference of two data points (X score at baseline and X score at follow-up) and then dividing the result by the standard error of difference (*Sdiff*) between the scores. The *Sdiff* is estimated using Standard Error of Measurement (*SEM*), such that *Sdiff = Sqrt (2)*SEM* (Jacobson and Truax 1991). The *Sdiff* describes the spread of the distribution of the difference scores. An RCI greater than 1.96 in absolute value would be unlikely to occur ($p < 0.05$) without actual change, which suggests a clinically significant change in score. The RCI was not calculated for the Readiness Ruler as a reliability score for test-rest or Cronbach's alpha is required to enable the calculation of the SEM, and there are no reports of this in literature for the Readiness Ruler.

Results

Motivational Interviewing Treatment Integrity (MITI) 4.2.1

Twenty percent of audio-recordings were coded using the MITI 4.2.1, and the practitioners continued to be provided with individual written feedback (Table 17 and Table 18). The two practitioners at Aviva, each submitted one audio-recordings throughout the study while the

practitioner at SVS submitted two. Based on Table 18, all the practitioners had a good level of proficiency in providing MI except for one practitioner who had a fair level of proficiency in technical and relational skills and reflection to question ratio. The practitioner had a good level of proficiency in providing complex reflections. For the comparison of practitioners' scores with the mean see (Figure 13).

Table 17
MITI 4.2.1 Results for Audio-Recordings of the Practitioner

Practitioners	Technical Skills	Relational Skills	R: Q ratio	CR: SR ratio
Practitioner 1	3.5	3.5	1:1	64%
Practitioner 2	4	4.5	1.90:1	70%
Practitioner 3	4	4.5	4:1	63%
Practitioner 3	4.5	4.5	2.76:1	66%

Table 18
Descriptive Statistics for Behaviour Counts

Behaviour Counts (n =5)	Mean	Standard Deviation	% Does Not Meet Threshold	% Fair Level of Proficiency	Good Level of Proficiency
Reflection to Question Ratio (R:Q)	2.41	1.27	0	0	100
Percent Complex Reflections (%CR)	65.75	3.09	0	0	100
Technical Skills	4	0.40	0	0	100
Relational Skills	4.25	0.50	0	0	100

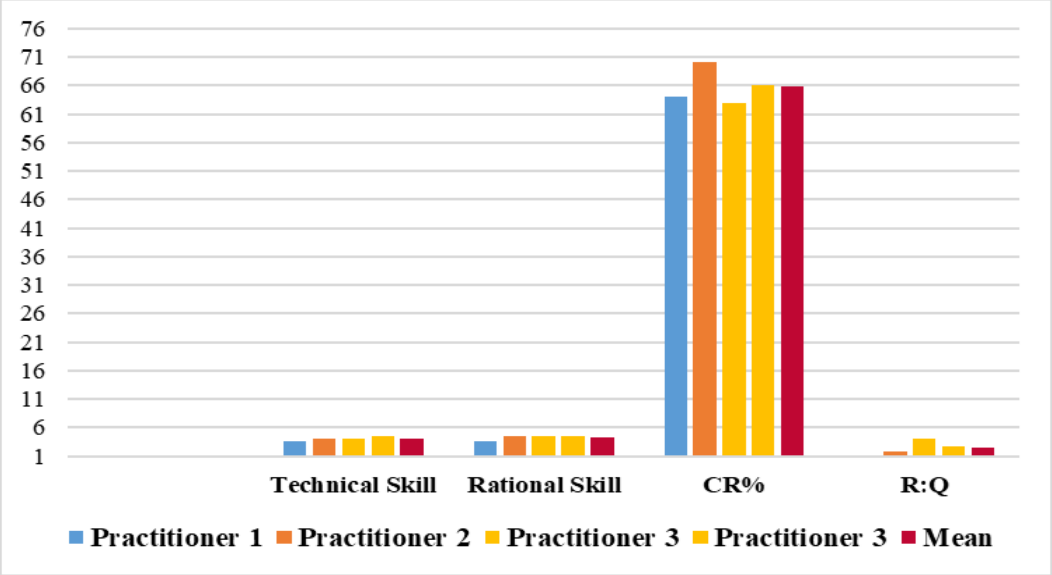

Figure 13. Comparison of Practitioners' MITI 4.2.1 Score with the Mean

Demographic and Clinical Characteristics

Since the current research was a non-randomised controlled study, it was important to examine potential between-groups differences that may have influenced the outcomes. The two groups were compared on all variables using Manne-Whitney test for continuous variables and chi-square test for dichotomous variables. Clients in the MI group were equivalent to those in the control group in terms of age, ethnicity, employment status, the criminal history of violence, and type of referral except for the level of education (this was controlled for in the subsequent analysis).

A total of 25 participants were recruited from July 2017 to November 2018. Characteristics of participants in MI and control group are summarised in (Table 19). Their ages ranged from 20 years to 56 years old, with a mean age of 33.96 years old (*SD* = 10.53). Also, more than half of the clients (56%) were mandated to attend an IPV programme. In regards to ethnicity, 72% were NZ European, 16% Māori, and 12% identified as other ethnicities. This was not comparable to Christchurch city population as based on the recent data on ethnic groups of Christchurch city residents in 2013, NZ European comprised 69.6%, Maori 6.6%, and other ethnicities 12.9% of the population (Stat 2013). It seemed that the number of Maori (16%) in the current study included a disproportionate number compared to the general population of 6.6%.

Table 19
Characteristics of Male Perpetrators at Aviva and SVS

Characteristics	**MI (n=15)**	**Control (n=10)**	**Total (n=25)**
Age in years, Mean (SD)	35.27 (11.10)	32(9.84)	33.96 (10.53)
Ethnicity n (%)			
NZ European	80 (12)	60 (6)	72 (18)
Maori	20 (3)	10 (1)	16 (4)
Pacific Islander	-	20 (2)	8 (2)
Other	-	10 (1)	4 (1)
Criminal history n (%)			
Yes			
No	73.3 (11)	60 (6)	68 (17)
	26.7 (4)	40 (4)	32 (8)
Employed n (%)			
Yes	66.7 (10)	30 (4)	52 (12)
No	33.3 (5)	70 (6)	48 (13)
Education n (%)			
Less than high school	60 (9)	100 (10)	40 (10)
High school	33.3 (5)	-	56 (14)
University	6.7 (1)	-	4 (1)
Mandated n (%)			
Yes	66.7 (10)	40 (4)	56 (14)
No	33.3 (5)	60 (6)	44 (11)
Intervention commencement n (%)			
Yes			
No	73.3 (11)	80 (8)	76 (19)
	26.7 (4)	20 (2)	24 (6)
Intervention completion n (%)			
Yes	60 (9)	40 (4)	52 (13)
No	40 (6)	60 (6)	48 (12)
Number of sessions attended n (%)			
0-6	46.7 (7)	70 (7)	56 (14)
6-10	20 (3)	-	12 (3)
10-16	33.4 (5)	30 (3)	32 (8)

Group Data Results (Primary Outcomes)

Research Question 3

Will participants receiving MI rate their readiness for engaging in the IPV intervention, higher than participants in the control condition?

Hypothesis. Participants who receive MI would rate their readiness to engage in IPV intervention higher than the participants in the control condition.

Motivational Interviewing for engagement produced higher mean ratings for readiness to IPV intervention (after controlling for pre-intervention readiness scores). This difference, however, was not statistically significant (r = 0.24) (Table 20).

Table 20
Readiness Ruler Ratings by Condition

Group	Mean*	95% Confidence Interval		Hypothesis Test	
		Lower bound	Upper bound	Test Statistics	P-Value
Control	8.48	6.59	10.37	F=0.8	P=0.3
MI	9.68	7.73	11.63		

*Readiness ruler means ratings are time 2 adjusted for time

Figure 14 shows the differences in the participants' readiness scores between the two organisations. At Aviva, readiness for IPV was rated higher by the MI participants (9.96) than the control group (9.40). Likewise, at SVS, the MI participants' readiness ratings (9.40) were higher than the control group (7.56). The interaction between group and organisation was not significant. This suggests that the two organisations were similar in terms of their clients' readiness for IPV intervention, with all participants expressing a high readiness for engaging in the IPV programme.

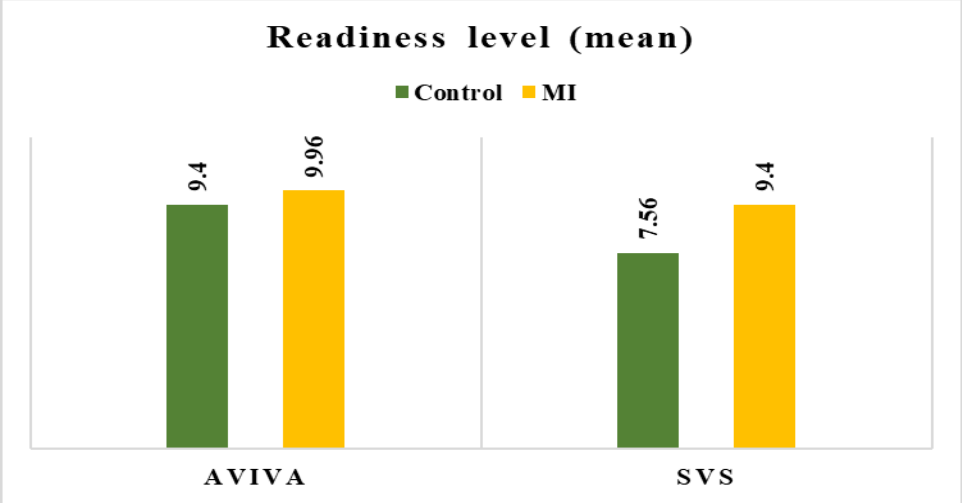

Figure 14. Marginal Mean Differences for Readiness (time 2) in MI and Control Group at Aviva and SVS

Research Question 4

Will participants who receive MI commence IPV intervention more than participants in the control condition?

Hypothesis. Participants who receive MI would commence IPV intervention more than the control participants.

A total of 73.3% of participants commenced intervention in the MI group compared to 80% of the participants in the control condition. The differences between the MI and the control group were not statistically significant.

Research Question 5

Will participants who receive MI attend a higher mean number of standard IPV sessions than participants in the control condition?

Hypothesis. Participants who receive MI for engagement session would attend a higher number of IPV sessions than the control condition.

Participants who received MI for engagement attended significantly more IPV programme sessions compared to those in the control group (mean rank = 12.18, 7, respectively) ($U = 20$, $p = 0.04$) (Figure 15). This result was also associated with a medium to large effect size (r = 0.45). Aviva and SVS were also compared in regards to the number of session attendance for their clients, and no statistically significant differences were found between MI and the control group at these organisations (Figure 16).

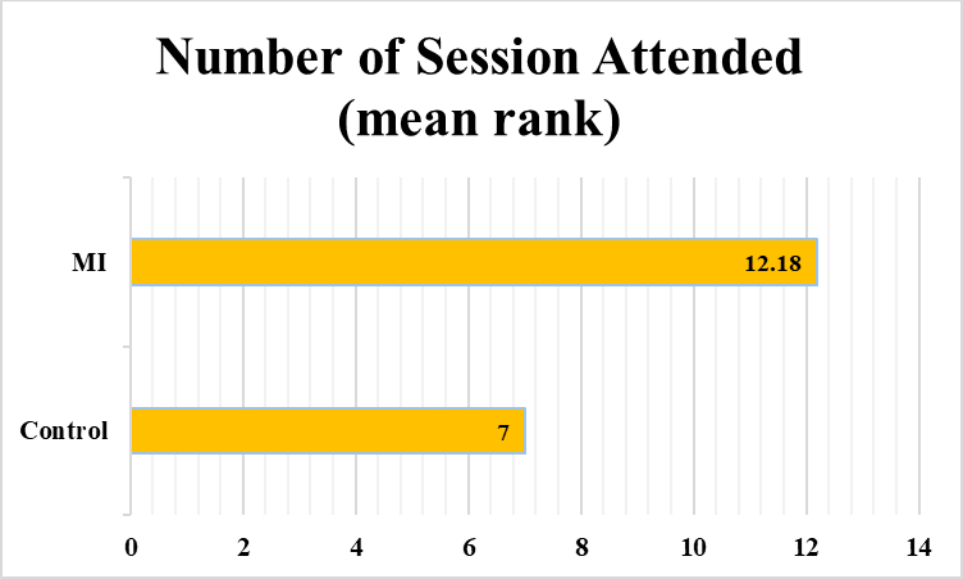

Figure 15. Comparison between the Mean Number of Session Attendance between MI and Control Group.

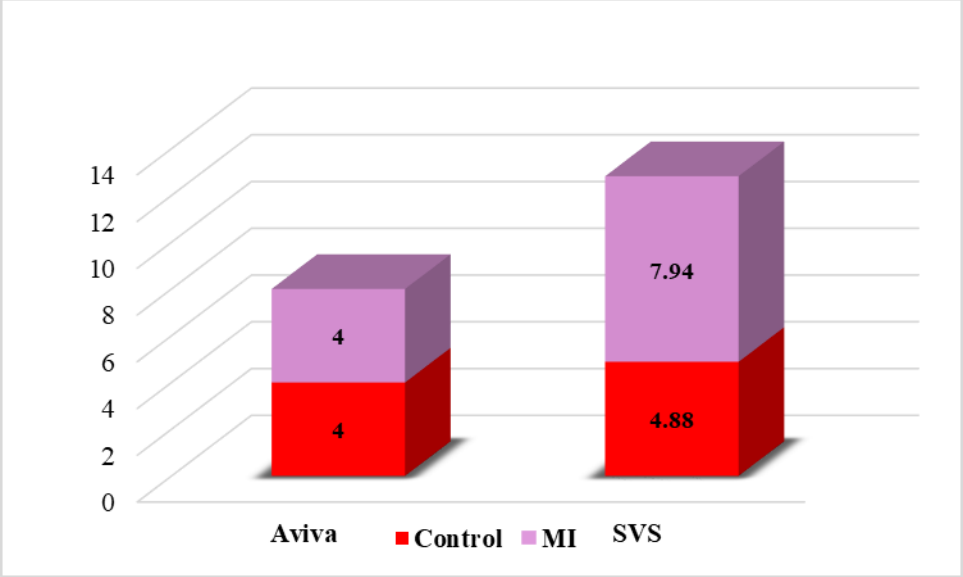

Figure 16. Comparison between the Numbers of Session Attendance (mean rank) between MI and Control Group at Aviva and SVS.

Research Question 6

Will participants who receive MI complete IPV intervention more than participants in the control condition?

Hypothesis. Participants who receive MI for engagement session would complete IPV intervention more than the control condition.

Participants who received MI were more likely to complete intervention (60%) than control participants (40%). The finding, however, was not significant and was associated with a small effect size ($\varphi = 0.03$) (Figure 17). Also, of 11 MI participants who commenced IPV intervention, nine of them (81.8%) completed the intervention, and from eight control participants who commenced IPV intervention, four (50%) completed it. The difference was not statistically significant.

As mentioned earlier, due to the different definitions of intervention completion between Aviva and SVS, the intervention completion was also analysed separately for these organisations. At Aviva, two out of four (50%) control participants and two out of four in MI participants completed IPV intervention. At SVS, two control participants out of six (33.3%) completed the intervention compared to seven out of 11 (63.6%) in MI participants. These differences, however, were not statistically significant.

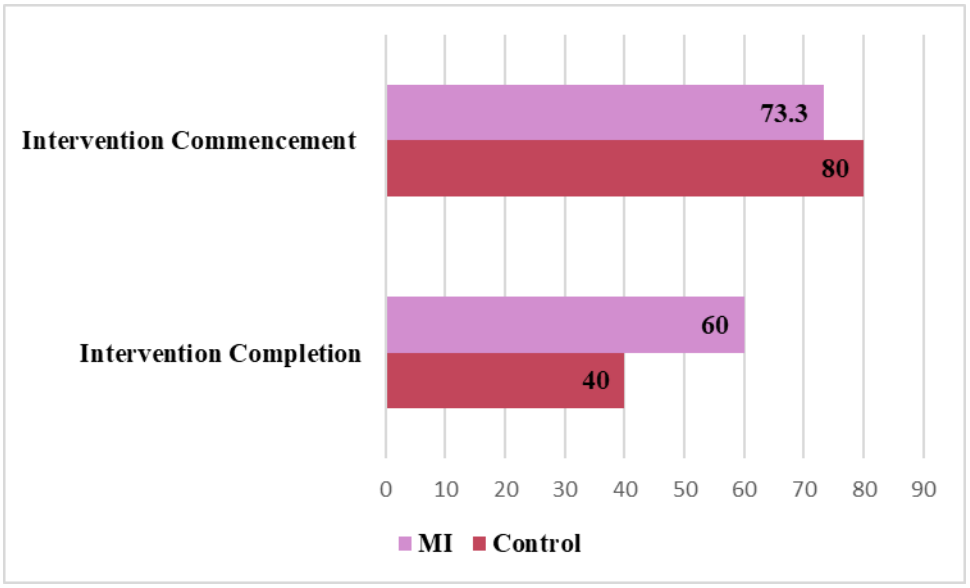

Figure 17. Comparison of Intervention Commencement and Completion Rate (%) between MI and Control Group.

Chi-square analysis showed no statistically significant result between mandated and non-mandated clients at SVS in regards to their intervention commencement and completion.

Group Data (Secondary Outcomes)

Research Question 7

Will participants who receive MI rate the importance of making a change to their IPV behaviour, and their ability and commitment to change this, higher than the control participants?

Hypothesis. Participants who receive MI would rate the importance of making a change to their IPV behaviour, and their ability and commitment to change this, higher than the control participants.

Importance of changing IPV behaviour. The level of importance of change was lower for the MI participants than the control group; however, this difference was not statistically significant (r = 0.45) (Table 21).

Table 21
Importance of Change Ratings by Condition

Group	Mean*	95% Confidence Interval		Hypothesis Test	
		Lower bound	Upper bound	Test Statistics	P Value
Control	9.58	8.92	10.23	F=3.42	P=0.08
MI	8.75	8.05	9.44		

*Importance of change means ratings are time 2 adjusted for time 1

The importance ratings at the two organisations were shown in (Figure 18). At Aviva, the importance of changing IPV behaviour was rated highly, at (9.48) by the control participants, and for the MI participants were rated at a lower level (8.48). Similarly, at SVS the importance of change for participants in the MI group was high (9.01) and lower than the control group (9.67). The interaction between group and organisation was not significant. This indicates that the two organisations were similar in terms of their clients' ratings of the importance of changing their IPV behaviour, with all participants expressing a high degree of importance for changing this behaviour.

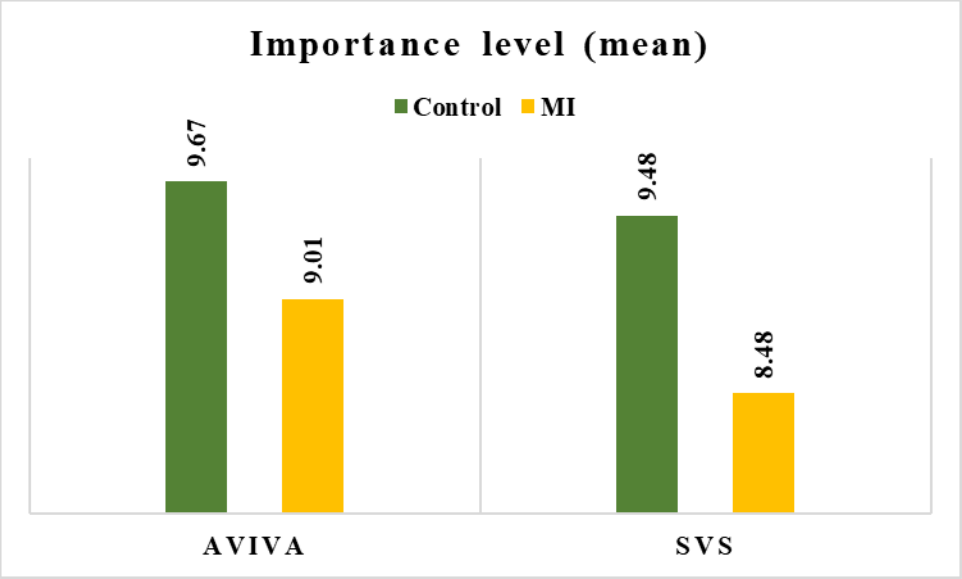

Figure 18. Marginal Mean Differences for Importance (time 2) in MI and Control Group at Aviva and SVS

Ability to change IPV behaviour. The participants in the MI condition rated their ability to make a change in their IPV behaviour higher than the control participants; however, this was not statistically significant (r = 0.10) (Table 22).

Table 22
Ability to Change Ratings by Condition

Group	Mean*	95% Confidence Interval		Hypothesis Test	
		Lower bond	Upper bound	Test Statistics	P-Value
Control	8.49	7.56	9.43	F=0.15	P=0.7
MI	8.75	7.75	9.74		

*Ability to change means ratings are time 2 adjusted for time 1

Figure 19 shows the ratings of the ability to make a change at Aviva and SVS. At Aviva, the ability to change was rated higher by the MI participants (9.03) than the control group (8.86). Likewise, at SVS, the MI participants' ratings of their ability to change (8.46) were higher than the control condition (8.13). The interaction between group and organisation was not significant,

suggesting that the two organisations were not different in terms of their clients' ratings of their ability to change their IPV.

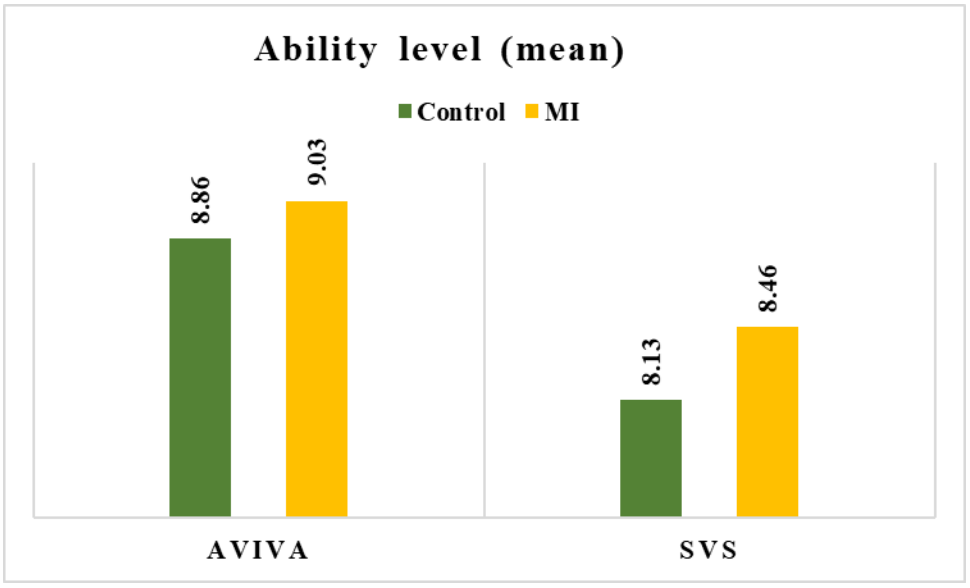

Figure 19. Marginal Mean Differences for Ability (time 2) in MI and Control group at Aviva and SVS

The commitment to change IPV behaviour. The control group participants rated their commitment to change their IPV behaviour (9.92) higher than the MI participants (9.39); however, this difference was not statistically significant (r = 0.41) (Table 23).

Table 23
Commitment Ratings by Condition

Group	Mean	95% Confidence Interval		Hypothesis Test	
		Lower bound	Upper bound	Test Statistics	P-Value
Control	9.92	9.44	10.39	F=2.59	P=0.1
MI	9.39	8.88	9.90		

*Commitment means ratings are time 2 adjusted for time 1

Figure 20 provides the commitment data for Aviva and SVS separately. The commitment ratings for the control participants at Aviva (9.92) was higher than the commitment to change ratings of the MI participants (9.65). Similarly, at SVS, the commitment to change ratings of the MI participants (9.13) were lower than the commitment to change ratings of the control group (9.92). The interaction between group and organisation was not significant, suggesting that two organisations were not different in terms of their clients' commitment to change their IPV behaviour, with participants at both organisations expressing a high commitment to change this behaviour.

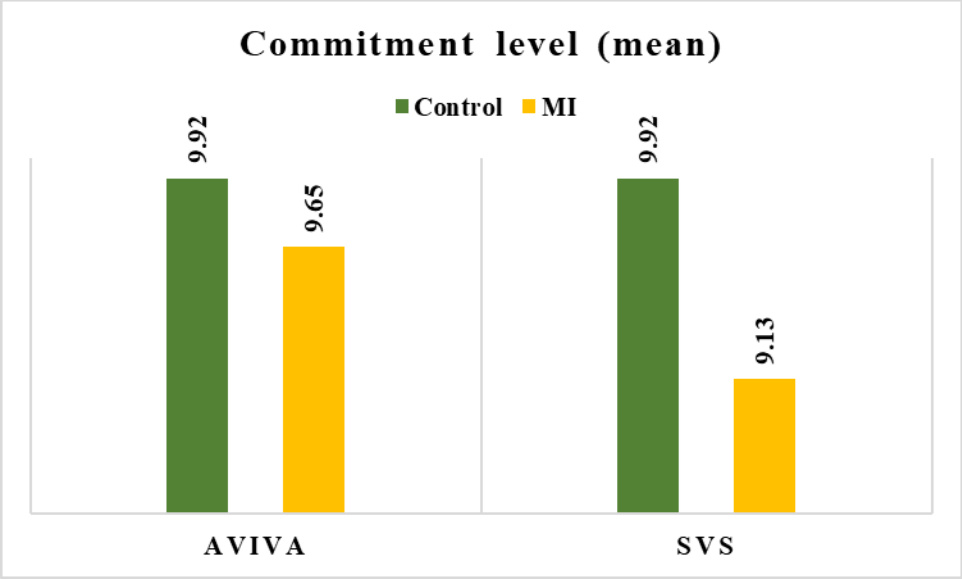

Figure 20 Marginal Mean Differences for Commitment (post-score) in MI and Control group at Aviva and SVS

Research Question 8

Will readiness to engage in IPV intervention, the level of importance to make a change in IPV behaviour, and ability and commitment to do so, predict IPV intervention commencement and completion?

Hypothesis. Intervention commencement and completion can be predicted by the level of readiness to engage in IPV intervention, the importance of making a change in IPV behaviour, and the ability and commitment to do so.

A Binomial logistic regression was performed to ascertain the effects of readiness to engage in the IPV intervention, importance, ability, and commitment to change the IPV behaviour on the likelihood that participants commenced or completed IPV intervention. For the Change Questionnaire (importance, ability, and commitment) and Readiness Ruler, post-scores were

entered into the analysis. The results showed that none of the variables mentioned above could predict the commencement or completion of the IPV programme.

Within-group differences. To understand the differences between pre-post scores (within-group differences), a Wilcoxon Signed-Rank test was conducted. The results showed statistically significant differences in the readiness score from pre- to post-MI (r = 0.64). While the level of ability (r = 0.27) and commitment to change (r = 0.54) was also higher from pre- to post-MI, these differences were not statistically significant (Table 24). For the control group, there were no significant differences from pre- to post-assessment for the Change Questionnaire items and Readiness Ruler.

Table 24

Pre-Post Differences in Change Questionnaire and Readiness Ruler in MI Group at Aviva and SVS

Change questionnaire variables	Pre-test (Mean)	Post-test (Mean)	Test Statistics	P-Values
Importance	8.93	8.92	Z=-1.34	0.1
Ability	8.27	8.42	Z=-0.95	0.3
Commitment	9	9.17	Z=-1.89	0.059
Readiness Ruler	8.47	9.42	Z=-2.23	0.026*

Statistical difference and equivalence for between-group variables. Readiness Ruler and Change Questionnaire scores were also examined using inferential statistics to evaluate statistical difference and equivalence between the MI and the control group from time 1 to time 2. No statistically significant differences were found for the Readiness Ruler or the Change Questionnaire items (importance, ability commitment) between the MI and the control group (Table 25 and Figure 21). With regards to statistical equivalence, the differences between the lower limit of the lesser mean and the upper limit of the greater mean for the Change Questionnaire items were less than the stipulated Delta value of 2.0 and therefore were statistically equivalent. However, with regards to the Readiness Ruler from pre- to post-MI, this was not the case ($R_g = 4$), which suggested that the mean scores for the control and MI participants were neither statistically different nor equivalent and hence were statistically indeterminate.

Statistical difference and equivalence for within-group variables. Likewise, no statistical differences or equivalence were found from time-1 (pre-MI) to time-2 (post-MI) for the Change Questionnaire items (importance, ability, commitment). However, the inferential CIs for the Readiness Ruler scores pre- and post-MI did not overlap, suggesting a statistically significant difference. These means, however, were equivalent (the differences between the lower limit of the lesser mean and the upper limit of the greater mean for the Readiness Ruler were less than the stipulated Delta value of 2.0) suggesting the differences in readiness from time 1 to time 2 were trivial (Table 26 and Figure 22).

Table 25
Inferential Confidence Intervals for the Readiness Ruler and Change Questionnaire, Between-Group Data

Groups	Inferential CIs Readiness	Inferential CIs Importance	Inferential CIs Ability	Inferential CIs Commitment
Control	7.06-9.89	9.053-10.10	7.80-9.17	9.56-10.27
MI	8.29-11.06	8.18-9.19	8.052-9.44	9.041-9.73

Table 26
Inferential confidence intervals for the Readiness Ruler and Change Questionnaire, Within-group data

Time	Inferential CIs Readiness	Inferential CIs Importance	Inferential CIs Ability	Inferential CIs Commitment
Time-1 (Pre)	8.01-8.93*	8.42-9.44	7.84-8.69	8.62-9.37
Time-2 (Post)	9.19-9.64*	8.54-9.29	8.03-8.80	8.88-9.45

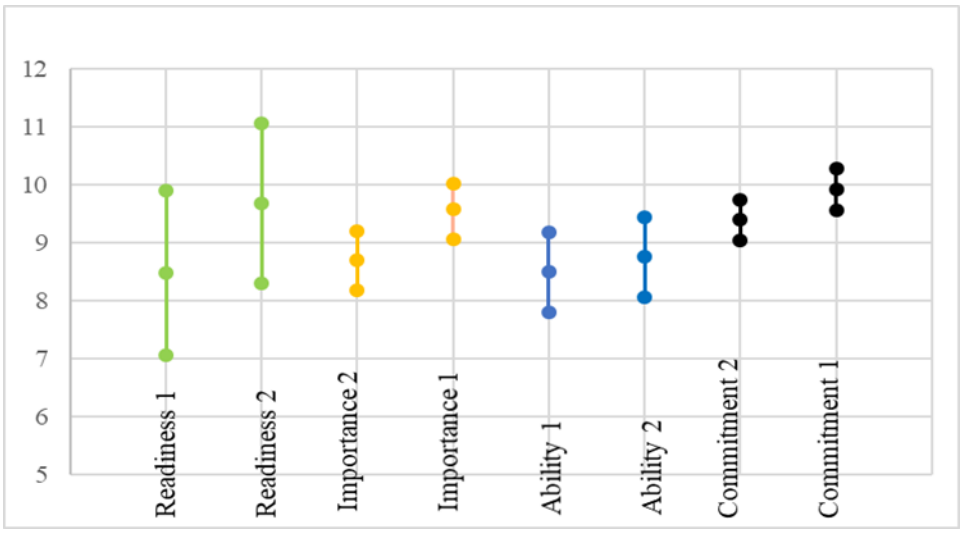

Figure 21. Inferential Confidence Intervals for the Readiness Ruler and Change Questionnaire Items for the Between-Group Variable (Means are overlapping each other)

Note: 1 = Control group, 2 = MI Group

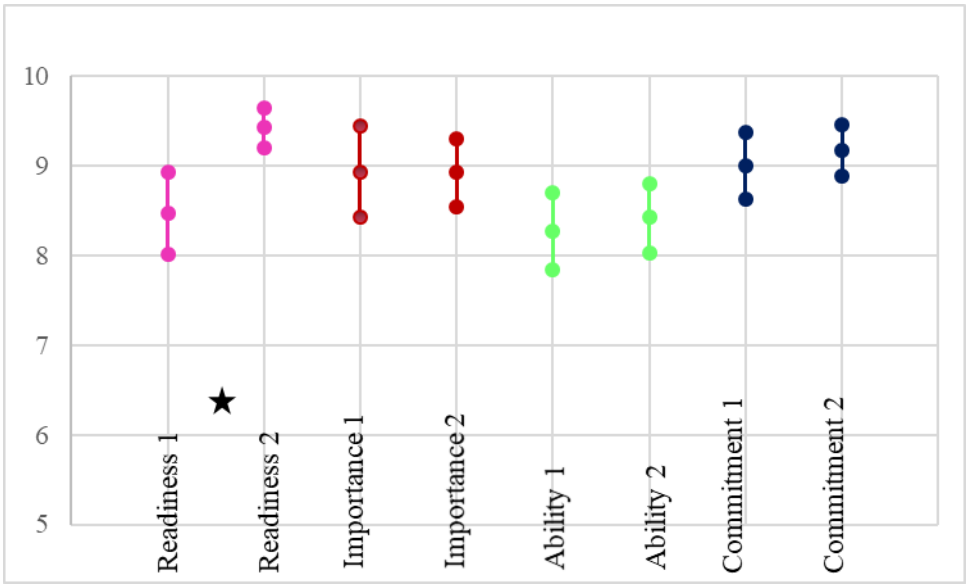

Figure 22. Inferential Confidence Intervals for the Readiness Ruler and Change Questionnaire Items for Within-Group Variables (Means for Readiness are not overlapping each other)

Note: 1 = Pre-MI (Time 1), 2 = Post-MI (Time 2)

Individual Data Results

Brinley Plot Results

The Brinley plots (Figure 23 and Figure 24) were used to understand the pattern of changes between MI and control group based on the individual level. As can be seen in Figure 23, many participants' ratings at baseline were already close to the maximum scores for the Change Questionnaire and Readiness Ruler, so there was a strong ceiling effect. This suggests that most of the participants at the baseline were reporting that they were ready for IPV intervention, and were reporting that it is highly important for them to change their IPV behaviour, and that they felt confident they could change this, and they were committed to doing so. Nevertheless, it was still possible to examine the pattern of individual change.

Primary Outcome

Readiness Ruler. It appears that MI contributed to an increase in the participants' readiness for IPV intervention (Figure 23) when compared to the control group. Two out of the eight control participants reported lower readiness for IPV intervention at time 2, whereas this was not the case for any of the 12 MI participants. Further, only one control participant rated his readiness for intervention higher at time 2, whereas 6 out of 12 MI participants reported an increase in their readiness for IPV intervention post-MI for engagement (time 2).

Secondary Outcome

Importance of change. For the control group (n=8), three participants did not have any changes in their score from time 1 to time 2; for four participants, the level of importance increased, and for one participant there was a reduction in his score. Further, the changes for two of the participants who had an increase in their ratings were clinically reliable changes.

In the MI group (n=12), a total of nine participants had no changes regarding their level of importance. Three participants had an increase in their ratings of the importance of change, of which two of them were clinically reliable changes.

Ability to change. Five participants' ratings of their ability to change their IPV behaviour stayed the same; two participants had an increase in the ratings of their ability to change, while one of the participant's scores reduced from time 1 to time 2, and this reduction was a clinically reliable change. Note that the reduction in the level of importance and ability was not the same person.

The ratings of ability to change for six of the MI participants were the same from pre- to post-MI (time 1 to time 2), and five participants had an increase in the ratings of their ability to change, of which one of these was a clinically reliable change. However, the rating of ability for one MI participant post-MI (time 2) decreased, and this was also a clinically reliable change.

Commitment to change. Four participants in the control group had an increase in the ratings of their commitment to change their IPV behaviour, and four had no changes from time 1 to time 2. The change in one of the participants' scores was a clinically reliable change.

The commitment ratings of eight of the MI participants stayed the same from pre- to post-MI (time 1 to time 2), and for four of the participants, their commitment ratings increased. However, none of these changes were clinically reliable changes (Figure 24).

Based on the above results and considering only clinically reliable changes, there appears to have been little clinically reliable changes in the participants' ratings of the importance, and their ability and commitment to change their IPV behaviour from time 1 to time 2, and that there was no discernible difference between the control and MI participants. A possible explanation for

not observing clinically reliable changes on these Change Questionnaire items was the ceiling effect, as most of the participants already had a high score at baseline.

However, for two participants in each of the MI and control group, there was a clinically reliable increase in their ratings of the importance to change. For both the MI and control groups, there was one participant for whom there was a clinically reliable decrease in the ratings of their ability to change their IPV behaviour from time 1 to time 2. Also, for the MI group, there was also one participant who had a clinically reliable increase in his ratings of confidence to change his IPV behaviour. Further, there was one person in the control group who had a reliable clinical increase in the ratings of his commitment to change his IPV behaviour.

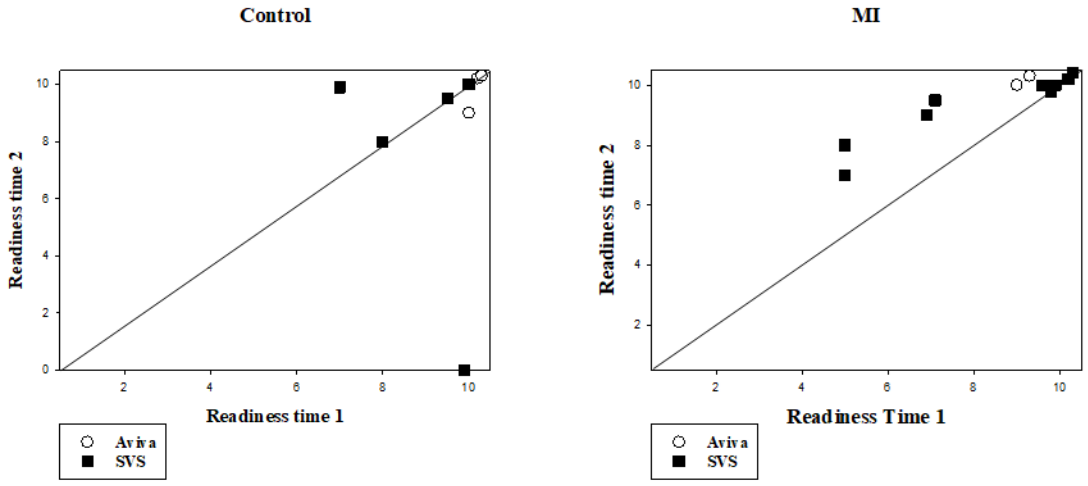

Figure 23. Brinley Plot Results for the Readiness Ruler

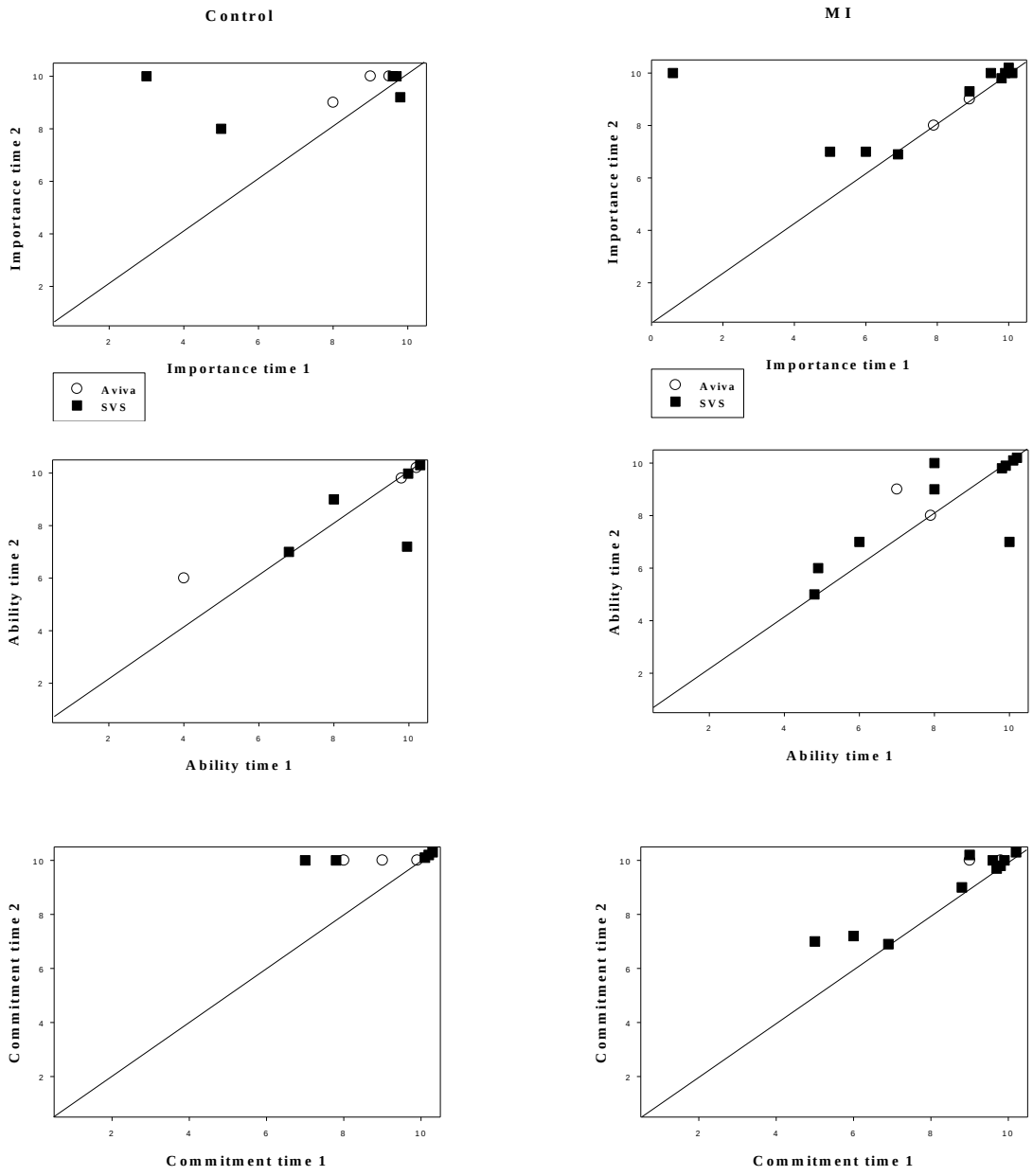

Figure 24. Brinley Plot Results for the Change Questionnaire Items

Discussion

Interventions for IPV have grown over the past two decades with the goal of preventing or at least reducing this form of violence (Connors, Mills et al. 2013). However, the scientific evidence supporting the effectiveness of IPV is still limited (Arias, Arce et al. 2013, Eckhardt, Murphy et al. 2013). The high prevalence of IPV internationally and in NZ, and high attrition rates from IPV programmes, signals a need for research to improve engagement and attendance at IPV intervention. Motivational interviewing has been proven to increase engagement and help behaviour change in many fields, and it has been suggested that it could be a useful intervention for increasing engagement in IPV settings as well (Wahab 2005, Mbilinyi, Neighbors et al. 2011, Crane and Eckhardt 2013). This study was conducted to assess the effectiveness of MI as a pre-assessment intervention to increase engagement among male perpetrators of IPV.

The results of the current study found that there were statistically significant increases in the participants' ratings of their readiness for IPV intervention after MI for engagement. The statistically significant result was obtained using Tryon's (2001) testing for statistical difference and equivalence and by testing for the statistical difference using Wilcoxon Signed-Rank test, which also yielded a large effect size. Further, the statistically significant difference was supported by analysis of the individual data, which found that six of the 12 participants who received MI rated their readiness for IPV intervention higher after receiving MI for engagement. In contrast, only one of the control participants rated their readiness for IPV intervention as higher at time 2, and two of the eight control participants reported a decline in their readiness for IPV intervention at time 2. These results were consistent with the notion of MI for intervention engagement being a means of preparing individuals to enter intervention programmes. Further, previous research has found that intervention outcome was related to the extent that clients were ready to receive the

intervention being offered to them (Maiuro and Murphy 2009). Thus, one of the important variables that may predict attrition (i.e., whether men are getting an adequate "dose" of IPV intervention) and subsequent recidivism is men's readiness for IPV intervention. It has also been reported that a brief Readiness Ruler is a good predictor of intervention outcome (Maher, Wang et al. 2012, Dean, Britt et al. 2016). Based on the ICIs results, the between-group data for the readiness score, however, was neither statistically different nor equivalent, suggesting a statistical indeterminacy. Thereby, no conclusion could be withdrawn about the impact of MI intervention on the readiness score for the group data between MI and control group. This usually occurs due to small sample size and inadequate power which might be the possible reason for the indeterminacy in the current study as well.

The results of the present research also suggested that MI did not significantly increase intervention commencement, but there was a statistically significantly greater number of intervention sessions attended for those participants who received MI for engagement when compared to the control group, with a medium to large effect size. This suggested that MI might, in fact, helped those who really did not want to be in the programme to be open and honest about this, and therefore those who did start were more committed to receiving the intervention. Further, while in the present study, nine of the 11 participants who received MI for engagement and commenced IPV intervention completed the intervention compared to 4 out of 8 in the control group, the two conditions did not vary significantly. A possible explanation for a non-significant result could be the small sample size that did not allow for detecting a statistically significant effect. In addition, it was difficult to interpret this result due to the different definitions of intervention completion between the two agencies.

These results were similar to past research that has evaluated the effects of MI on IPV intervention engagement, although the findings were mixed. For example, Taft, Murphy, Elliott, and Morrel (2001) found that a 10-week IPV programme supplemented with motivational enhancement techniques led to greater attendance and program completion relative to participants in the treatment as usual condition. Similarly, Musser and Murphy (2008) found that MI, as a pre-IPV group intervention, significantly enhanced IPV intervention engagement and help-seeking behaviour, but did not significantly alter IPV programme session attendance. Further, a single Brief Motivational Enhancement (BME) interview to increase intervention compliance and reduce recidivism rates in male perpetrators of IPV (Crane and Eckhardt 2013) found that those in MI condition attended more IPV programme sessions (M =12.2, SD = 1.5) than the control group (M = 8.3, SD = 1.8).

The results of the present research were also consistent with other research on MI for engagement more generally (i.e., not within the IPV area). For example, another NZ study of MI for engagement (Dean, Britt et al. 2016), found that MI for engagement with adolescents with anxiety and depression led to a statistically significantly greater number of mental health treatment sessions attendance (4.0, range of group means 2.6, 5.0, n=46) compared to the control group (mean across group means = 2.7, range of group means 1.8, 4.1, n=50). Also, Murphy, Thompson, Murray, Rainey, & Uddo (2009) evaluated the effectiveness of a 4-session (1.5 hours long each), group-based motivation enhancement intervention, based on MI, to improve group CBT treatment's engagement of military veterans. They found higher attendance rates for the MI group compared to the control group (*Cohen's d* = 0.37), and participants in the treatment group remained in the CBT programme for a longer period of time than participants in the control condition (*Cohen's d* = 0.47).

With respect to secondary outcome measures, no statistically significant or pattern of clinically reliable changes in the Change Questionnaire (importance, ability, and commitment) were found between the MI and control group, or for the MI participants at time 1 and time 2. This suggested that there were little changes in the participants' ratings of the importance of changing their IPV behaviour and the ratings of their ability to change their IPV behaviour and their commitment to do so.

While no statistically significant within-group differences were found for both the MI and control groups on the Change Questionnaire, the MI participants ratings of their ability and commitment to change their IPV behaviour from pre- to post-MI increased with small and large effect sizes (0.27 and 0.54 respectively), whereas there was no such change for the control participants. This suggested that MI for engagement not only increased the participants' readiness for IPV intervention but may also have increased their confidence and commitment to change their IPV behaviour. Increased confidence in changing IPV behaviour is important as self-efficacy determines whether a behaviour will be changed, how much effort will be expended, and how long it will be sustained in the face of obstacles (Luszczynska, Schwarzer et al. 2011, Iyar, Cox et al. 2019). Individuals with a high level of confidence are more likely to persevere in challenging situations and feel more optimistic, even after encountering failure (Iyar, Cox et al. 2019). Increases in ratings of ability to change as a result of MI was also reported in Lundahl et al.'s (2010) meta-analysis of 25 years of MI research (n=119 studies). Commitment is also crucial in behaviour change as it provides substantial and durable changes, meaning the changes in behaviour are large enough to have an impact, and that they will last for the long term, without the need for reminders or further interventions (Lokhorst, Werner et al. 2013).

Another finding of the current study was that participants' self-ratings of their readiness for intervention, and importance, ability, and commitment to change their IPV behaviour did not predict intervention commencement and completion. Also, one puzzling finding of the present research was that the participants' ratings of importance and commitment to change were lower in MI group compared to the control condition. The reason for this was unclear, yet it should be noted that these lower ratings did not impact the improvements in readiness for intervention observed for the participants who received MI for engagement. It is important to note that the baseline scores for these variables were high in both groups and at both organisations. These high scores suggested that overall participants in this study were reporting a high sense of importance to change their IPV behaviour, and were highly confident and committed to doing so. This suggested a ceiling effect, which may have precluded the ability to find pre- and post- statistically and clinically significant changes. Another possible explanation could be that the control group might be saying what they think the practitioners want them to say, whereas the MI group might feel safe to give a more accurate assessment of importance and commitment. The Brinley Plot confirmed the above findings, showing minor increases and few clinically reliable changes for the Change Questionnaire.

Several reasons can be noted as to why the non-significant findings occurred in the current study. As mentioned earlier, one possibility was the small sample size and inadequate power. Additionally, as 56% of the participants were mandated to attend IPV, it was important to consider the degree to which these men were attempting to present in a socially desirable way as most of the time they were likely to be resistant, defensive, and in denial of their problems (Zalmanowitz, Babins-Wagner et al. 2013). Further research with this population could utilise a test of social desirability such as the Marlowe–Crowne Social desirability test to control for presentation bias

(Reynolds 1982, Saunders 1991). Another explanation could be that the MI employed in the study did not provide a sufficient MI dose to yield significant effects on all of the outcome measures. That is, MI for engagement may have enhanced engagement in IPV as measured by the number of session attendance and the participants' readiness for IPV intervention but did not have an effect on the important, ability, and commitment to change and IPV intervention completion.

The results from the MI training study (Chapter 5) suggested that all of the practitioners involved in the outcome study (Chapter 6) were able to provide MI to at least a fair level of proficiency. Further, audio-recordings throughout the study were coded, which again reflected at least a fair level of proficiency in MI skill. However, these practitioners were still new to MI (although expert in counselling and other therapy skills) and delivering skilful MI within challenging environments, such as IPV settings with high work demands, and becoming expert in the technical aspect of MI (eliciting and strengthening change talk and softening sustain talk) may require more MI training than provided within the current study (Miller and Moyers 2006). Thus, it may be that the results could be stronger if the practitioners were more skilful in MI. Also, it is important to note that due to the small sample sizes of practitioners providing MI (n=3), any individual variation in MI fidelity could have a large impact on the client's outcomes.

Regarding significance testing, Garamszegi (2006), suggested that considering the overall pattern of findings may reveal that a particular effect is small, but still important, whereas, the all-or-nothing approach may lead the researchers to conclude that the hypothesised phenomenon does not exist at all. Therefore, considering the improvement of variables among participants between the control and MI group is suggested rather than relying solely on finding a significant *p*-value. This was a strength of the current study as analysis extended beyond traditional statistical testing

to include testing of difference and significance, and evaluation of individual data in addition to group data.

The study faced some challenges which were similar to the challenges that social work studies usually have to handle. One of these challenges was that some (or many) of the specific demands of experimental designs were difficult to achieve in real-life settings (Cluss and Bodea 2011). In such settings (such as IPV settings), real-life needs and demands must take precedence over scientific method (Cluss and Bodea 2011). A homogeneous sample, random assignment, adequate sample size, and a control group often cannot be achieved for very practical reasons. In the current study, problems were mostly related to the sample size and inability to implement randomisation. For example, researchers may have to, as in the current study, use a convenience sampling (i.e., whoever shows up for treatment in a given time frame). In addition, making audio-recordings available for coding, feedback, and coaching can be difficult as practitioners have to manage this along with time constraints, work demands, and their own performance anxiety; as well as obtaining client consent for this (Baer, Rosengren et al. 2004, Bennett, Moore et al. 2007, Forrester, McCambridge et al. 2008). Organisational culture can provide support for, or barriers, to adopting the use of MI (Hohman 2015). Organisations who have a culture of being open to change, and encourage and support staff to try new practices are more likely to see gains in MI skills.

Moreover, the current study did not answer an important question, “does the intervention reduce IPV recidivism?” It is recommended that future research gathers data on IPV behaviour from participants at least six months or 12 months after completion of the IPV program. Data regarding recidivism will give researchers a clearer understanding of the program’s impact in real life and whether the participants have been able to desist from IPV behaviour. Also, troubling was

that while the current study was based on those participants who attended at least the first assessment session, what often occurs in IPV settings is that IPV perpetrators never actually present to IPV services, and so do not access IPV intervention.

Conclusion

The study examined MI for engagement as a pre-intervention method to engage perpetrators in IPV programmes. In the process, an MI protocol with a clearly-specified focus on intervention engagement was used, allowing for direct exploration of IPV engagement. In keeping with the research questions and hypothesises for this study, those receiving MI significantly attended more IPV sessions, showed higher readiness to engage in IPV intervention, higher ability for making a change, and completed the IPV programmes more than participants in the control group. The last three results were not statistically significant. Within-group differences in MI group for readiness were also found to be statistically significant. These results were consistent with the individual data analysis using Brinley Plot, showing that more clients in the MI group had rated their readiness higher at time 2 compared to the control group. Therefore, a brief session of MI for engagement is a cost-effective intervention that could be provided before IPV intervention to increase engagement in that intervention.

It was the first study in NZ to the researcher's knowledge that has evaluated MI specifically targeting intervention engagement for perpetrators of IPV. The focus on engagement was into consideration of practical and psychological barriers to attending IPV intervention, and intrinsic motivation relating specifically to engagement in the IPV programme was also elicited. In doing so, the perpetrators' current concerns, previous experiences with therapy, and beliefs about the IPV intervention were explored. It was also the first study that had addressed the limitation in previous similar research by ensuring that practitioners who were delivering MI demonstrated MI-

consistent behaviour and their fidelity to MI was assessed and maintained at least at a fair level of proficiency throughout the study.

This quasi-experimental study supports the feasibility of establishing routine use of 'MI for engagement' conversations with IPV perpetrators. Further, while ongoing coaching post-workshop-based training in MI is required to develop and maintain MI skill (Miller, Yahne et al. 2004, Lundahl and Burke 2009), the benefits of this are likely to outweigh the costs to IPV programmes, perpetrators, their family, and the wider community.

The next chapter comprises a discussion of the overall findings, including the utility of MI for engagement and generalisability of the results to other settings, as well as the practicality of using MI in practice. The thesis ends with a discussion of the strengths and weaknesses of the studies in this research, and suggestions for future literature.

CHAPTER 7: CONCLUSION

Chapter Overview

This chapter will:

- Discuss the main findings of the current research
- Review the utility of MI for engagement and feasibility of applying the results to IPV settings
- Discuss the strengths and weaknesses of the studies in this thesis
- Provide suggestions for future research

Conclusion

The outcome of IPV intervention is hampered by high rates of non-attendance and drop-out, low motivation or readiness to change, problems in the establishment of a therapeutic alliance, and limited engagement in treatment activities such as homework assignments. As a brief pre-treatment intervention, MI has the potential to improve engagement, particularly for individuals with lower motivation levels. Furthermore, MI may be particularly well suited for those mandated to attend IPV intervention programmes and those who may not yet be committed to active personal change. Previous research on MI as preparation for IPV intervention has reported mixed results. It is also difficult to draw conclusions from previous research due to methodological issues, which the current study aimed to address. In particular, this study sought to explore the impact of MI for engagement, as opposed to MI for behaviour change, on engagement in IPV intervention. This was done by drawing from an engagement protocol developed by Zuckoff et al. (2015), where factors that may influence engagement in IPV intervention were explicitly addressed. These factors include practical barriers (e.g., transport), symptoms (e.g., anxiety, low energy), previous experiences of treatment, and psychological barriers (e.g., beliefs about the effectiveness of an intervention). The thesis presented three studies that had a number of research aims, as outlined below.

Research Aims

1. Evaluate IPV intervention commencement and completion, and the number of sessions attended at Aviva and SVS to determine to what degree lack of engagement (as measured by fail to commence or attend appointments, or early termination from intervention) is an issue at each of these key IPV service providers in Christchurch.

2. Evaluate the effectiveness of MI training for practitioners working in the IPV area, which also served to prepare them to utilise MI in Study 3.

3. Evaluate the effectiveness of MI for engagement, as a brief pre-intervention engagement method, for enhancing engagement of male perpetrators in IPV intervention.

Research Hypothesis

It was hypothesised that training practitioners in MI would increase their skilfulness in MI. It was also hypothesised that MI for engagement would enhance engagement of male perpetrators in IPV interventions as measured by their level of readiness to attend IPV intervention; intervention commencement and completion; and the number of sessions attended. Further, it was hypothesised that MI for engagement would also increase the participants' ratings of the importance of making a change to their IPV behaviour, and their ability and commitment to do so.

Discussion of the Main Findings

Key findings from the audit study (Study 1) were that IPV intervention commencement at Aviva and SVS was relatively high at 84.6% and 89.2%, respectively. Further, it was found that intervention commencement rate at SVS was significantly predicted by the type of referral (i.e., mandated versus non-mandated), and mandated individuals were more likely to commence IPV intervention than non-mandated individuals.

Intervention completion, however, was lower at Aviva (46.2%) compared to SVS (82.1%). This may, in part, have been due to the different definitions of intervention completion between the two agencies. Aviva defined completion to be when the client had achieved the goals of the intervention, whereas at SVS clients were considered to have completed the intervention upon finishing the number of IPV sessions that they were assigned to, regardless as to whether behaviour change had occurred. Because data from Aviva were not available on the actual number of sessions

attended, it was not possible to compare session attendance between the two agencies. The number of sessions attended would have provided more comparable data than intervention completion due to the different definitions of completion used at Aviva and SVS.

A recent report from the Family Violence Clearinghouse in NZ (2007) found that from 5254 men who were referred to IPV intervention in 2005, only 31% commenced the assessment, and only 20% completed IPV intervention. The results of the current study suggested higher intervention commencement and completion at both Aviva and SVS. It is recommended that future research also analyses the number of repeated referrals (the same client) to agencies and also evaluates the number of clients who complete IPV intervention having met pre-determined goals, rather than just using session attendance as a proxy for intervention completion.

The results of Study 2 demonstrated that the MI training (2-day workshop plus post-workshop feedback and coaching) produced measurable gains in the MI skills of practitioners working in IPV. These results were consistent with previous research on MI training which indicated that practitioners could develop MI-consistent skills post-workshop based training, and post-workshop feedback and coaching further develops MI skilfulness and facilitates the transfer of these skills to the workplace (Miller, Yahne et al. 2004, Moyers, Manuel et al. 2008). The other finding of Study 2 was that with post-workshop feedback and coaching, practitioners were able to maintain their skilfulness up to nine months after the initial MI training workshop. It was unclear; however, whether they continued to use MI in their routine work context beyond the period of supervised practice when the research ended.

The feedback provided by practitioners in Study 2 yielded face validity for the use of MI within the IPV setting. Themes that emerged from the practitioners elucidated the benefits of MI in the IPV context. In particular, MI's focus on the autonomy of clients, and the potential for

increasing motivation for change and intervention engagement were seen as important benefits of MI in the IPV area. The practitioners also noted that in order to increase the feasibility of the implementation of MI in their settings, they required time to both practice MI and to develop their MI skills (i.e., as opposed to competing demands of having to complete an in-depth assessment such as at SVS). Problems mentioned by the practitioners in the current study have been noted in previous studies as well (Baer, Rosengren et al. 2004, Wilkinson 2015). This emphasises the importance of management supporting the implementation of MI within agencies. Even highly motivated practitioners ready to learn a new skill are likely to fail to implement the new skill in practice should there not be sufficient organisational support to give them the space for practicing and developing their new found skills.

The failure to translate research findings into clinical practice is an ongoing challenge (Damschroder, Aron et al. 2009). This concern has resulted in the development of an area of research, known as implementation science (Fixsen, Blase et al. 2013). In an attempt to foster the implementation of research outcomes to clinical practice, and ultimately improve outcomes, a set of core implementation components have been described by Fixsen, Blase, Naoom, and Wallace (2009). These included an appropriate staff selection process, in-service training, coaching, and ongoing consultation, staff performance assessment, and systems considerations to ensure financial, organisational, and human resources required to support the practitioners were available. Likewise, Handley, Gorukanti, and Cattamanchi (2016) suggested that the implementation of EBPs into practice should be guided by three crucial principles. First of which relates to the behaviour change that is essential for the translation of evidence into practice. In most situations, an evidence-practice gap exists because individuals or organisations are not doing something that is recommended (i.e., they are not performing the EBP as it is prescribed). Therefore, strategies

are required to encourage providers to follow clinical practice guidelines within organisations. Next, it is imperative to engage with a range of individuals and stakeholders within the organisation(s) to achieve effective translation and sustained improvement in implementation outcomes. Finally, implementation science research benefits from flexibility and often non-linear approaches in order to fit within real-world situations, because translating evidence into practice requires attention to real-world settings in which many contextual variables will influence the implementation process and may require revisiting earlier steps in the process. For example, new barriers can become apparent over time or reflect changes in the environment, such as the addition of new guidelines or technologies that impact the processes involved in the behaviour.

In Study 3 (evaluation of MI for engagement), the within-group analysis revealed a statistically significant result for the Readiness Ruler from pre- to post-MI (time 1 to time 2), which was associated with a large effect size. This suggested that participants were more ready to engage in IPV intervention after MI for engagement. In contrast, there was not such an increase in readiness for the control participants. The individual data also showed that MI contributed to increased readiness for IPV intervention, compared to the control group. While two out of the eight control participants reported being less ready to engage in IPV intervention at time 2, this was not the case for any of the 12 MI participants. Further, only one control participant rated his readiness to engage in IPV intervention higher at time 2, whereas about half of the MI participants reported an increase in readiness to engage in IPV intervention. Further, the MI participants attended a statistically significantly greater number of intervention sessions compared to control participants. More (60%) of the MI participants also completed intervention than the control participants (40%), although this difference was not statistically significant.

However, with regards to the secondary outcomes (the Change Questionnaire items), the results showed no statistically significant differences between the MI and control group from time 1 to time 2 for the level of importance to change IPV behaviour, and their ability and commitment to do so. This was confirmed with a Mann-Whitney U test, the ICIs, and the Brinley plot analysis. When considering the RCI, two participants in each of the MI and control group had clinically reliable increases in their ratings of the importance of change. Further, one participant from both the MI and control group had a clinically reliable decrease in the rating of their ability to change their IPV from time 1 to time 2. In addition, one MI participant had a clinically reliable increase in his ratings of confidence to change his IPV behaviour. Finally, one control participant had a clinically reliable increase in the ratings of his commitment to change his IPV behaviour. Therefore, considering clinically reliable changes, there appears to have been mixed findings in the participants' ratings of the importance of change, and their ability and commitment to change their IPV behaviour from time 1 to time 2, with no discernible difference between the control and MI participants. These results may simply reflect that MI for engagement did not impact on Change Questionnaire items. It could also be that the lack of statistically or clinically significant changes on the Change Questionnaire items (importance, confidence, and commitment to IPV) may have been due to a ceiling effect as participants provided high ratings for these items at baseline. These high ratings may mean that the participants considered changing their IPV behaviour as highly important and that they were very confident and highly committed to change the behaviour. Alternatively, these high ratings on the Change Questionnaire items could be attributed to participants presenting themselves in a positive light as possible given that most of them were mandated to attend the IPV programme. It is interesting to note that the MI participants tended to rate the importance of changing their IPV behaviour and their commitment to doing so lower than

the control participants. Yet, despite this, more of the MI participants expressed an increased readiness for IPV intervention after receiving MI for engagement, compared to the control group. Enhancing readiness for IPV intervention was the primary outcome of interest in this study. Thus, the findings of the current study are consistent with the notion of MI for engagement being a useful means of preparing individuals to enter intervention (Maher, Wang et al. 2012).

Another possible explanation for the lack of statistically significant results in Study 3, in addition to possible ceiling effects, was the small sample size, and therefore, inadequate power. Further, the practitioners providing MI were still relatively new to the practice of MI. While the MITI results suggested that they had at least a fair level of competency in MI, past research reports that it takes time for MI to be learnt and implemented, especially in challenging settings, such as IPV settings (Miller and Moyers 2006). Therefore, greater practitioner expertise in MI may have led to greater changes for the participants.

It should also be noted that the researcher provided the MI for engagement at SVS, as she was employed by SVS during the course of the study. It may be that she was more willing to adhere to what was considered a good MI practice. It may also be that she integrated MI into her work more readily than may be the case for other professionals who were working in the IPV field. Additionally, because she was relatively new to the IPV area, it may be that she was more open to adopting MI within this context than will be the case for those who have worked in the IPV area for a longer time. This raises some questions regarding the generalisability of these results. Thus, further research is needed to determine whether the MI for engagement can be effectively implemented in typical IPV practice.

In summary, the results from Study 3 were consistent with previous research that found MI could increase readiness for intervention (Dean, Britt et al. 2016), improve session attendance and

enhance intervention completion (Taft, Murphy et al. 2001, Scott, King et al. 2011, Dean, Britt et al. 2016). Therefore, the findings of the current research recommended that MI for engagement might be a promising approach for male perpetrators of IPV. Further, the results recommended that MI can be integrated into existing practice in IPV settings. However, there were limitations to the current studies that should be considered.

Limitations

In Study 1 (the audit of Aviva and SVS), some demographic variables, such as the level of education, the criminal history of violence, and the level of employment, that could have an impact on the outcome of interest (IPV intervention commencement and completion) were not available from Aviva, so this analysis was limited to data available from SVS only. Additionally, only those clients for whom all the required data were available were included in the analysis. This may mean that the results of Study 1 were not entirely representative of what actually happens at Aviva and SVS.

Another limitation of the current research was that in Study 2 (the evaluation of MI training), the MI skills demonstrated in the recorded sessions could be the practitioners' best practices as they selected the audio-recordings to be coded. It would have been better if the MITI coding was of randomly selected audios from as many recorded sessions as possible of their routine practice. Another issue was the high attrition rate between those who attended the workshop and those who completed it and later submitted audio-recordings for review. There were several possible reasons as to why this has occurred, including time constraints and high workload and high staff turnover within the agenesis. Again some of the solutions to this lie with having the active support from management to provide staff with the time and perhaps change some of the

demands of the practitioners so that they are able to attend training, without interruption, and to practice MI within their work context.

In Study 3, despite the similarity between the control and MI participants on background factors, it was still possible that the groups differed on other unmeasured and uncontrolled variables. For example, different court personnel or probation officers may have been involved over time, or perceptions of legal sanctions for noncompliance may have changed across groups. Moreover, it was possible that the increase in the number of sessions attended, intervention completion, and readiness for IPV intervention were due to other factors outside of MI. In particular, an increased number of session attendance and completion rate may have been due to improvements in the intervention (i.e., either changes in the programme or changes in personnel) provided at Aviva and SVS. Such explanations cannot be ruled out in the absence of a randomised experimental design. Beyond this, the relatively small sample size and a considerable number of individuals who failed to attend the second assessment session (n=5) limit the generalisability of the findings.

Another limitation was that the evaluation of engagement was limited to the Readiness Ruler, the intervention commencement and completion, and the number of sessions attended. The engagement was used interchangeably across studies with intervention drop-out, attendance at appointments, and completing assigned tasks often used as measures of engagement (Lindsey, Brandt et al. 2014). Most commonly in IPV research to date; the primary outcome measures are the number of session attendance, intervention commencement, and completion rate. The adequate identification and measurement of outcomes are especially problematic for IPV evaluation. How do we measure ‘he hasn’t changed’ or ‘he’s doing better’? What to measure, when to measure it and how to measure it are critical questions (Cluss and Bodea 2011). A broader approach to

exploring engagement may enhance researchers' understanding of intervention outcomes (Lauch, Hart et al. 2017). Future studies may consider measures such as recidivism and CTS as another proxy for intervention engagement. Despite these limitations, the present study has several strengths, which are described below.

Strengths

The first strength of the study was the inclusion of the two main organisations providing IPV intervention services in Christchurch, NZ. Consequently, a close working relationship was developed with Aviva and SVS so that the research was addressing a true concern of these organisations (i.e., clients failing to attend IPV intervention or dropping out early from the programme), which had also been identified in previous NZ and overseas research.

The plan to conduct an initial pilot study was also a positive of the current study. While the pilot study planned to be run at Hew Waka Tapu was unsuccessful (due to clients cancelling or not turning up for appointments, and those who did present were not willing to participate in the pilot study), it informed the researcher that He Waka Tapu was not a suitable organisation for the main study (Study 3). Therefore, the possibility of undertaking the research at another organisation providing IPV intervention in Christchurch was explored.

Another strength was that the practitioners at Aviva and SVS were trained in MI to prepare them in providing the MI for engagement, so that Study 3 would be as close as possible to a test of MI for engagement in a real clinical setting (i.e., rather than bringing in outside experts in MI to provide the MI for engagement). Additionally, it was attempted to ensure that the practitioners had an acceptable level of MI skilfulness before the commencement of Study 3, and MI skill was maintained (at least at a fair level of proficiency) throughout the intervention. This was achieved by MITI 4.2.1 coding of audio-recordings of client sessions and providing feedback on their

practice. Although as acknowledged earlier, it would have been even better to use randomly selected audios for this.

A further strength was the distinction made between MI for engagement and MI for behaviour change, which has been less clear in past research of MI for engagement in the IPV context. In addition, the development of a protocol for MI for engagement in IPV settings (adapted from Dean et al.'s, (2016)) increased the likelihood that the practitioners provided a well-defined and consistent focus for all participants. Equally important was that the protocol was not prescriptive, rather it allowed practitioners to respond to each participant's experience flexibly; this was important given that manualised MI has been associated with poorer outcomes (Lundahl, Moleni et al. 2013).

The qualitative component of the study (in Study 2) can also be viewed as a strength. This allowed the exploration of the practitioners' attitudes to, and experience of the training process and the use of MI within the IPV area. This provided a greater depth of information about MI for engagement within the IPV context.

Having limited exclusion criteria for Study 3 was another strength as this increased the external validity of the research. The quasi-experimental design used, however, was more sensitive to internal validity problems (Dimitrov and Rumrill Jr 2003). Random assignment to groups would have meant that the two groups could be equalised on existing characteristics and, thereby, making it more likely that any effects observed were due to the intervention, rather than differences between the two groups.

Another strength of the current thesis was the extension of analysis beyond traditional statistical testing to include: testing of difference and significance; and testing for reliable clinical change, rather than just focusing on statistically significant change. Moreover, the use of the

modified Brinley plots provided a visual element to observe any differences between MI participants and control participants at time-1 and time-2. The Brinley plot allows for clean, easily interpretable pre-/post-intervention data, as each individual was represented by a single point rather than a line connecting time points (Curreri, Woods et al. 2019). The individual data analysis conducted in the current study had the advantage of focusing on changes at an individual level and observing the emergence of patterns across participants. Individual data analysis has not previously been presented in research investigating the effectiveness of MI for engagement in IPV context.

A visual approach provides more information about the efficacy of an intervention for specific individuals, compared to a strictly nomothetic approach focusing on the average response of a large number of individuals (Curreri, Woods et al. 2019). For this reason, it has been argued that there should be a greater focus on the individual when measuring the clinical change in clinical trials (Black, Blampied et al. 2018), such as in the current research.

Another strength of Study 3 was the inclusion of the Readiness Ruler as a measure of the participants' readiness for IPV intervention. This provided a more direct measure of the outcome of MI for engagement, as MI for engagement is about increasing an individual's readiness to engage in a subsequent treatment. Intervention commencement and completion and the number of sessions attended were also used as measures of engagement but were open to other influences (e.g., how the participant experienced the intervention) rather than being a direct effect of MI for engagement.

Finally, this thesis took a systematic and comprehensive approach to explore the issue of IPV engagement. This commenced by first identifying the extent of the issue and current approaches to IPV engagement and drop-out through a literature review. Then the audit (Study 1) was conducted to evaluate the engagement rate of clients at Aviva and SVS. Subsequently, the

staff at these organisations were trained in MI for engagement to enable them to implement MI at their organisations and to prepare them for the outcome study (Study 3), and this training and the practitioners' experiences were evaluated (Study 2). Of importance in designing Study 3 was the effort the researcher took to ensure that the research procedures and design of the study could be fitted as easily as possible within their routine clinical practice, with minimal changes to their usual work context. This helped with maintaining the practitioners' and the organisations' support for the research and increased the generalisability of the results.

Several recommendations for future research have arisen in the course of this thesis, and have been discussed with each study as it has been presented. There are, however, some key recommendations for future research that have emerged.

Recommendations for Future Research

Further research, including randomised controlled trials, evaluating MI for engagement (as defined in this thesis), as a means of promoting engagement in IPV intervention is recommended to test the replicability and generalisability of the findings of this thesis (Study 3).

It would also be useful for future audit studies (Study 1) to examine the number of re-referrals (same client) to IPV organisations after finishing an IPV intervention. This would provide another source of information about IPV interventions' success. It is also recommended that future research evaluates if clients at IPV agencies were able to achieve the objectives of the intervention as a measure of IPV intervention completion.

In addition, with regards to research on MI training (Study 2) and outcome (Study 3), further research needs to be undertaken to determine what additional measures can be taken to facilitate an increase in MI audio submission, particularly in real-work/clinical settings. To increase practitioners' engagement in submitting audios it is recommended that time be allocated

for practice, with encouragement and ongoing support from management, as well as the inclusion of MI skill development, and support within staff performance plans and appraisals (Wilkinson 2015). Additionally, when interpreting the results of the MITI 4.2.1, it is important that future studies record as many sessions as possible and then randomly select the audios to be reviewed and coded. Also, future research would benefit from consideration of practitioners' training based on their attitude towards MI and whether they are willing to learn a new method and to put in the time and effort to practice it in their daily routine.

It would be useful for research to investigate the cost-effectiveness of selecting staff for training and subsequent use of MI with clients based on pre-selected baseline skills. It could then be that practitioners with an interest in learning MI and an aptitude for MI could be trained in MI for engagement. These practitioners could then be the practitioners who have the initial client contact with a view to increasing engagement with the service and IPV intervention specifically. It would be useful to establish the cost-effectiveness of this approach compared to an agency-wide approach to the training and implementation of MI.

To establish an effective method for pre-MI training selection, it would be useful for future research to evaluate a process for pre-training selection developed by Miller et al. (2005). They developed this process for use in a large clinical trial in which they needed to get the practitioners in the trial to achieve a proficient level of MI within a short period of time. It involved potential trainees submitting an audio-recording of a conversation in which they were instructed to demonstrate good reflective listening skills, which was then coded, and the R: Q ratio calculated, using the MITI 4.2.1. The practitioners' ability to demonstrate good reflective listening as evidenced by the R: Q ratio prior to MI training, means that these core skills would not have to be

trained and training then could focus on refining these skills and developing the spirit and technical aspects (cultivating change talk and softening sustain talk) of MI.

Finally, future outcome studies (Study 3) could also evaluate the process of MI using a sequential analysis (Gaume, Gmel et al. 2008). This could be used to explore the relationship between practitioner behaviour and client change (and sustain) talk, and outcome.

In conclusion, while the needs of researchers and practitioners working in IPV settings may be divergent at times; the reality is that they are all working to the same end, that being, to reduce IPV and to maximise the safety of women and children who are the potential victims of IPV. It is important to evaluate the effectiveness of EBPs, such as MI for engagement, in IPV settings. The current thesis contributed to the knowledge in this area by addressing gaps in the literature, by evaluating MI as a pre-treatment intervention for increasing engagement, and including a fidelity measure. The overall findings of this MI study recommended that well-defined MI for engagement has promise as a method to increase male perpetrators of IPV engagement in IPV intervention. Further research, however, is required to test the replicability and generalisability of the findings.

Me mahi tahi tātou mo te oranga o te whānau

Working together for the wellbeing of family

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APPENDIX

Appendix A: Ethical Documents

Health and Disability Ethics Committees
Ministry of Health
133 Molesworth Street
PO Box 5013
Wellington
6011

0800 4 ETHICS
hdecs@moh.govt.nz

08 June 2017

Mrs Sara Soleymani
2/41 Naseby Street
Christchurch 8014

Dear Mrs Soleymani

Re:	**Ethics ref:**	**17/CEN/98**
	Study title:	Enhancing engagement in Intimate Partner Violence treatment

I am pleased to advise that this application has been *approved* by the Central Health and Disability Ethics Committee. This decision was made through the HDEC-Expedited Review pathway.

Conditions of HDEC approval

HDEC approval for this study is subject to the following conditions being met prior to the commencement of the study in New Zealand. It is your responsibility, and that of the study's sponsor, to ensure that these conditions are met. No further review by the Central Health and Disability Ethics Committee is required.

Standard conditions:

1. Before the study commences at *any* locality in New Zealand, all relevant regulatory approvals must be obtained.

2. : Before the study commences at *any* locality in New Zealand, it must be registered in a clinical trials registry. This should be a WHO-approved (such as the Australia New Zealand Clinical Trials Registry, www.anzctr.org.au). However https://clinicaltrials.gov/ is acceptable provided registration occurs prior to the study commencing at *any* locality in New Zealand.

3. Before the study commences at *a given* locality in New Zealand, it must be authorised by that locality in Online Forms. Locality authorisation confirms that the locality is suitable for the safe and effective conduct of the study, and that local research governance issues have been addressed.

Non-standard conditions:

- In the Participant Information Sheet, please note the Central HDEC and not the Northern B HDEC. Central HDEC is allocated with overseeing your ethics submissions.
- Please clarify in the Participant Information Sheet the way participants will be selected to participate in the control or intervention group (ie. 1:1 randomisation?)

Non-standard conditions must be completed before commencing your study. Non-standard conditions do not need to be submitted to or reviewed by HDEC before commencing your study.

If you would like an acknowledgement of completion of your non-standard conditions letter you may submit a post approval form amendment. Please clearly identify in the amendment that the changes relate to non-standard conditions and ensure that supporting documents (if requested) are tracked/highlighted with changes.

For information on non-standard conditions please see section 128 and 129 of the Standard Operating Procedures at http://ethics.health.govt.nz/home.

After HDEC review

Please refer to the *Standard Operating Procedures for Health and Disability Ethics Committees* (available on www.ethics.health.govt.nz) for HDEC requirements relating to amendments and other post-approval processes.

Your **next progress report** is due by **07 June 2018.**

Participant access to ACC

The Central Health and Disability Ethics Committee is satisfied that your study is not a clinical trial that is to be conducted principally for the benefit of the manufacturer or distributor of the medicine or item being trialled. Participants injured as a result of treatment received as part of your study may therefore be eligible for publicly-funded compensation through the Accident Compensation Corporation (ACC).

Please don't hesitate to contact the HDEC secretariat for further information. We wish you all the best for your study.

Yours sincerely,

Mrs Helen Walker
Chairperson
Central Health and Disability Ethics Committee

Encl: appendix A: documents submitted
appendix B: statement of compliance and list of members

Appendix A
Documents submitted

Document	*Version*	*Date*
PIS/CF: PIS and CF	1	22 May 2017
Survey/questionnaire: Change Questionnaire and Readiness Ruller	1	22 May 2017
Protocol: Research Proposal	1	22 May 2017
CV for CI	1	23 May 2017
Evidence of scientific review: Ph.D. confirmation Written Report Form	1	23 May 2017
Doctoral Confirmation Approval Letter	1	23 May 2017
Application		

Appendix B
Statement of compliance and list of members

Statement of compliance

The Central Health and Disability Ethics Committee:

- is constituted in accordance with its Terms of Reference
- operates in accordance with the *Standard Operating Procedures for Health and Disability Ethics Committees*, and with the principles of international good clinical practice (GCP)
- is approved by the Health Research Council of New Zealand's Ethics Committee for the purposes of section 25(1)(c) of the Health Research Council Act 1990
- is registered (number 00008712) with the US Department of Health and Human Services' Office for Human Research Protection (OHRP).

List of members

Name	*Category*	*Appointed*	*Term Expires*
Mrs Helen Walker	Lay (consumer/community perspectives)	01/07/2015	01/07/2018
Dr Angela Ballantyne	Lay (ethical/moral reasoning)	30/07/2015	30/07/2018
Dr Melissa Cragg	Non-lay (observational studies)	30/07/2015	30/07/2018
Dr Peter Gallagher	Non-lay (health/disability service provision)	30/07/2015	30/07/2018
Mrs Sandy Gill	Lay (consumer/community perspectives)	30/07/2015	30/07/2018
Dr Patries Herst	Non-lay (intervention studies)	27/10/2015	27/10/2018
Dr Dean Quinn	Non-lay (intervention studies)	27/10/2015	27/10/2018
Dr Cordelia Thomas	Lay (ethical/moral reasoning)	20/05/2017	20/05/2020

Unless members resign, vacate or are removed from their office, every member of HDEC shall continue in office until their successor comes into office (HDEC Terms of Reference)

http://www.ethics.health.govt.nz

Ngāi Tahu Consultation and Engagement Group

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

23/06/2017

Tēnā koe, Sara

RE: Motivational Interviewing for Enhancing Engagement in Intimate Partner Violence Treatment

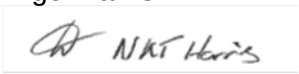
This letter is written on behalf of the Ngāi Tahu Consultation and Engagement Group. I/We have read and considered your proposal and acknowledge that this is a worthwhile and very interesting project there have been no issues identified.

It is well considered and the researcher is clear about how they ought to take participants' (cultural) needs into account if and when applicable.

Thank you for engaging with the Māori consultation process. This will strengthen your research proposal, support the University's Strategy for Māori Development, and increase the likelihood of success with external engagement. It will also increase the likelihood that the outcomes of your research will be of benefit to Māori communities. We wish you all the best with your current project and look forward to hearing about future research plans.

The Ngāi Tahu Consultation and Engagement Group would appreciate a summary of your findings on completion of the current project. Please feel free to contact me if you have any questions.

Ngā mihi
Nigel Harris



Kaiārahi Māori Research
Research and Innovation
Te Whare Wānanga o Waitaha
Private Bag 4800
Otautahi Christchurch 8140
Aotearoa New Zealand
Phone +64 3 364 2987 ext 45520/6120 cell 0273950134 nigel.harris@canterbury.ac.nz

All enquiries, 24-hours: 0800 AVIVA NOW (0800 28482 669) or (03) 378 3847
Web: www.avivafamilies.org.nz **Email:** enquiries@avivafamilies.org.nz
PO Box 24 161, Christchurch 8642

aviva
Family Violence Services

Ms Helen Walker
Chairperson, Central Health and Disability Ethics Committee,

26th July 2017

Dear Ms Walker

RE: Ethics Approval Consideration of Research to take place at Aviva

Aviva specialises in sexual and family violence services that are designed to support people overcome the effects of violence and create safer, more fulfilling futures. We have continually evolved our services over the past four decades and will continue to do so. We are always looking at ways to improve our effectiveness and were pleased to be in discussion with Sara Soleymani, Eileen Britt, and Mark Wallace-Bell over the last few months focused on the merits of Motivational Interviewing. We are pleased to have been presented with an oppourtunity to apply Motivational Interviewing before men commence treatment programmes at our organization.

This project/thesis will comprise three main phases: an evaluation of the current treatment approach at

Aviva, a training study in which our staff at Aviva will be trained in MI by meber of Motivational Interviewing Network of Trainers (MINT), in preparation for the third phase of the study which is an evaluation of MI for engagement.
We are looking forward working together in a project that has both 'good intent' and 'academic rigour' at its core.

Please contact me on details below if more information is required.

Kind regards,

Nicola Woodward

Nicola Woodward
CEO

the loft
Located at The Loft, Level 1, Eastgate Shopping Centre, Christchurch 8062

School of Health Sciences
Agreement concerning owenership of intellectual property, data access, sharing and authorship

Agreement between: Aviva and Sara Soleymani (School of Health Sciences, University of Canterbury), Dr Eileen Britt (School of Health Sciences, University of Canterbury), and Dr Mark Wallace-Bell (School of Health Sciences, University of Canterbury).

Title of redearch project: Enhancing Engagement in Intimate Partner Violence (IPV) Treatment

We agree

Authorship

- Sara Soleymani, Eileen Britt, and Mark Wallace-Bell shall be an author on any publication(s) arising directly this project. The agreed of authorship among those involved in the research is as follow: Soleymani, Britt, Wallace-Bell.
- Aviva receives a draft of any publication(s) material arising directly this project.
- Authors submitting any manuscript will declare the relationship of the first author (Sara Soleymani), with Aviva (i.e. holding a volunteering position at this centre).

Data Storage

- Sara Soleymani will take responsibility for the long-term storage of the raw and processed data from the project/thesis.

Disputes

- If any disagreement arises among ourselves as how this agreement should be interpreted and applied we will use our best endeavours, acting in good faith, to resolve any disagreement and difficulties.
- If discussion among ourselves cannot resolve any dispute in a timely way we will submit the matter to mediation, the mediator being selected with the agreement of us by the head of department or some other appropriate University official.

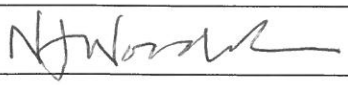
Non-disclosure of Confidential Information

- The information about clients will be anonymous and any publication out of the information will be in a way that does not identify or disadvantage participants. Each participant will be identified by a code number for each questionnaire. As a result, their identity will not be disclosed.

Variations

- This agreement may be amended with the signed and dated agreement of the parties to it.

Signatures

Sara Soleymani	
Eileen Britt	
Mark Wallace-Bell	
Nicola Woodward: CEO Aviva	

Ms Helen Walker

Chairperson, Central health and Disability Ethics Committee

21/09/2017

Dear Ms Walker

Re: Ethics Approval consideration of research to take place at Stopping Violence Services Christchurch

Stopping Violence Services(SVS) has been providing non-violence programmes for men and women since 1983 and for youth since 2008. We have continually evolved our services over the past three decades and will continue to do so. We are always looking at ways to improve our effectiveness and were pleased to be involved in discussions with Sara Soleymani, Eileen Britt, and Mark Wallace-Bell over the last few months focused on the merits of Motivational Interviewing (MI). We are pleased to have been presented with an opportunity to apply motivational interviewing techniques before men commence treatment programs at our organisation.

This project will comprise three main phases : an evaluation of the current treatment approach at SVS, a training study in which our staff at SVS will be trained in MI by a member of Motivational Interviewing Network of Trainers (MINIT), in preparation for the third phase of the study which is an evaluation of MI for engagement.

We are looking forward to working together in a project that has both 'good intent' and 'academic rigour' at its core.

Please contact me on the details below if more information is required.

Yours Sincerely

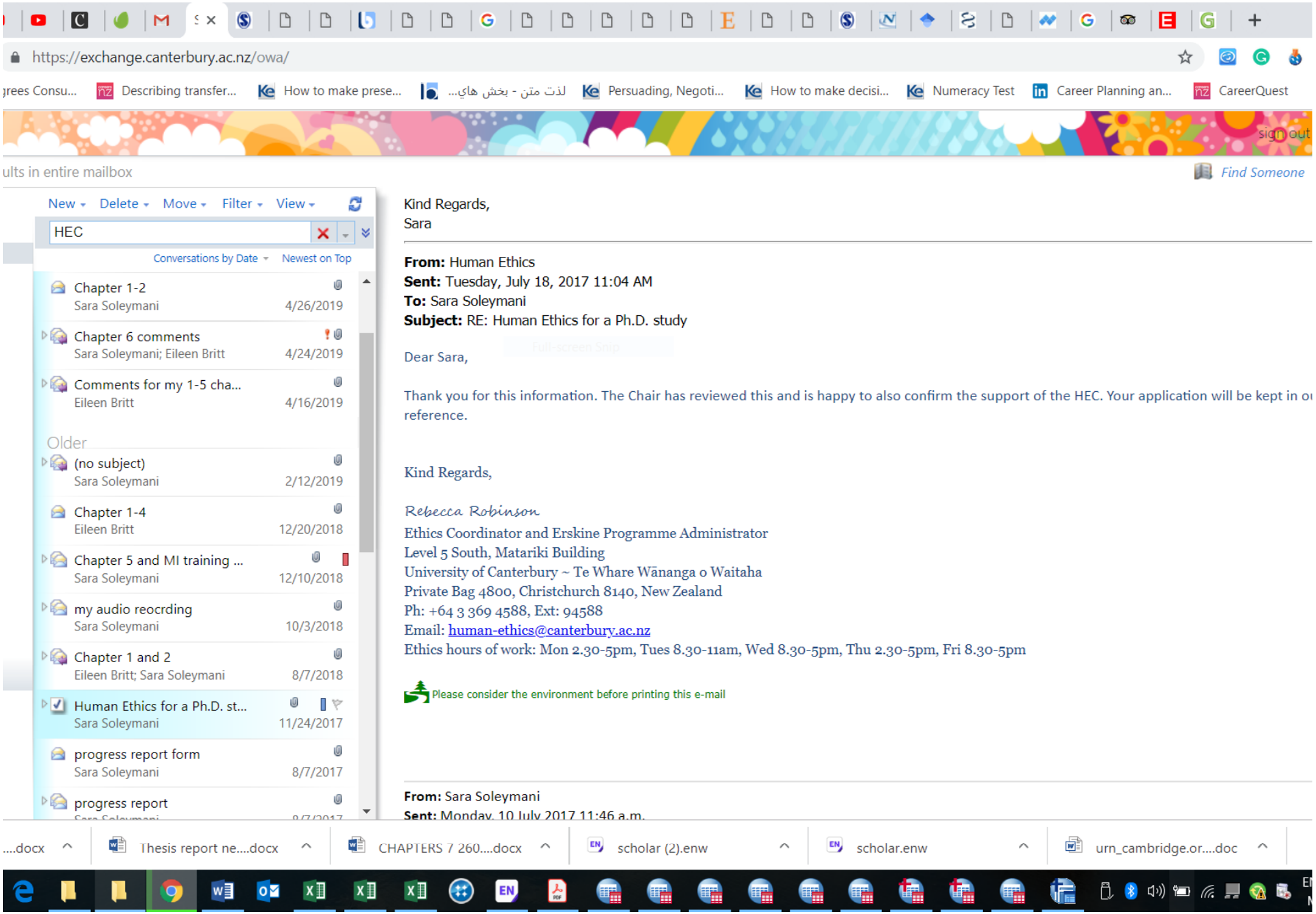
David Coom

Clinical Team Leader

Stopping Violence Services Christchurch

03 3656266

0278173467


https://exchange.canterbury.ac.nz/owa/
Describing transfer...
How to make prese...
Persuading, Negoti...
How to make decisi...
Numeracy Test
Career Planning an...
CareerQuest
sign out
Find Someone
New
Delete
Move
Filter
View
HEC
Conversations by Date
Newest on Top
Chapter 1-2
Sara Soleymani
4/26/2019
Chapter 6 comments
Sara Soleymani; Eileen Britt
4/24/2019
Comments for my 1-5 cha...
Eileen Britt
4/16/2019
Older
(no subject)
Sara Soleymani
2/12/2019
Chapter 1-4
Eileen Britt
12/20/2018
Chapter 5 and MI training ...
Sara Soleymani
12/10/2018
my audio reocrding
Sara Soleymani
10/3/2018
Chapter 1 and 2
Eileen Britt; Sara Soleymani
8/7/2018
Human Ethics for a Ph.D. st...
Sara Soleymani
11/24/2017
progress report form
Sara Soleymani
8/7/2017
progress report
Kind Regards,
Sara
From: Human Ethics
Sent: Tuesday, July 18, 2017 11:04 AM
To: Sara Soleymani
Subject: RE: Human Ethics for a Ph.D. study
Dear Sara,
Thank you for this information. The Chair has reviewed this and is happy to also confirm the support of the HEC. Your application will be kept in ou
reference.
Kind Regards,
Rebecca Robinson
Ethics Coordinator and Erskine Programme Administrator
Level 5 South, Matariki Building
University of Canterbury ~ Te Whare Wānanga o Waitaha
Private Bag 4800, Christchurch 8140, New Zealand
Ph: +64 3 369 4588, Ext: 94588
Email: human-ethics@canterbury.ac.nz
Ethics hours of work: Mon 2.30-5pm, Tues 8.30-11am, Wed 8.30-5pm, Thu 2.30-5pm, Fri 8.30-5pm
Please consider the environment before printing this e-mail
From: Sara Soleymani
Sent: Monday, 10 July 2017 11:46 a.m.
Thesis report ne....docx
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APPENDIX B: Information Sheet for Practitioners Attending the Workshop Training

Information Sheet for Practitioners Attending the Workshop Training

Study title:	Enhancing Engagement in Intimate Partner Violence Intervention	
Locality:	**SVS/Aviva**	
Lead investigator:	**Sara Soleymani**	Contact phone number: 03-3693694

We are asking if you would like to be part of a study on Enhancing Engagement in Intimate Partner Violence intervention in collaboration with SVS/Aviva. It is your choice to be in the study or not.

- If you don't want to be in the study, you don't have to give a reason.
- If you do want to be in the study, but change your mind later, you can pull out of the study at any time.

The information below will help you decide if you would like to be in the study. It describes why we are doing the study, what you will be asked to do, what the benefits and risks to you might be, and what will happen after the study ends. We will go through this with you and answer any questions you may have. This will take about 5-7 minutes.
If you agree to be in the study, you will be asked to sign the Consent Form on the last page of this document. You will be given a copy of the Information Sheet to keep.

This document is 4 pages long, including the Consent Form. Please make sure you have all the pages.

Why are we doing the study?

We are interested to know if we can improve attendance at the Intimate Partner Violence Intervention programs at SVS/Aviva by adding 2 Motivational Interviewing (MI) for engagement sessions before the intervention begins. Motivational Interviewing is a partnership

way of working with people, and MI for engagement is based on the concept that motivation for engagement includes, but is not limited to, the motivation for change.
For this study, MI will be provided by SVS/Aviva Staff as part of the standard intake procedure run by Social Workers. As a result, you (as a Social Worker working at SVS/Aviva) will be trained in MI by members of the Motivational Interviewing Network of Trainers (MINT). The training will comprise two one-day workshops, followed by individual feedback and coaching on MI skills to get these to at least a fair level of MI skilfulness. Before the first session of the training and after the second session your MI skills will be measured by a Video Assessment of Simulated Encounters-Revised (VASE-R).

The engagement sessions after MI training will be audio-recorded and coded using the Motivational Interviewing Treatment Integrity (MITI 4.2.1) scale by the MINT members as a measure of treatment integrity. Also, a focus group will be conducted to explore your experiences of MI after you have been trained in MI and had the opportunity to utilise it with clients.

The study is a partnership between SVS/Aviva and the University of Canterbury. If you have any questions about the study, please feel free to contact Sara Soleymani at 0210308361 or sara.soleymani@pg.canterbury.ac.nz

The study has ethical approval from:

- Central Health and Disability Ethics Committee
- Human Ethics Committee, University of Canterbury.
- Maori Research Advisory Group, University of Canterbury

What are the possible benefits and risks to you of being in the study?

There are not expected to be any risks or discomfort from being in the study. We will ensure that care is provided to everyone who is in the study.

You will be trained in MI by members of the Motivational Interviewing Network of Trainers (MINT) and will receive individual feedback and coaching on your MI skills.

What are my rights if I am in the study?

- It is up to you whether you want to be in the study. You are free to say no to be in the study and you can choose to leave the study at any time without any disadvantage.

- If you agree to be in the study, your engagement sessions (before and after MI training) will be audio-recorded. The audio recordings will be stored in a password protected electronic file, and your name and any related documents will be stored in a secure office in the School of Health Sciences at the University of Canterbury. You can ask to have any of the information about you collected as part of the study.

What will happen after the study ends, or if you pull out?

- All information collected during the study will be securely stored in a secure office at the University of Canterbury. It will be stored either in a locked filing cabinet (ratings) or in password-protected electronic files (audio recordings). The information will be stored for 10 years and then destroyed – questionnaires will be shredded and electronic files deleted.

- The information may be used during that time for further studies.

- The findings of the study may be written up in scientific journals or presented at conferences, but no names or other ways in which you could be identified will be used.

- A summary of the findings will be sent to everyone who agrees to be in the study by the end of June 2019.

Where can you go for more information about the study, or raise concerns or complaints?

- If you have any questions, concerns or complaints about the study at any stage, you can contact:

  Sara Soleymani, Ph.D. Candidate, School of Health Sciences, University of Canterbury
  Phone: 0210308361
  sara.soleymani@pg.canterbury.ac.nz

- If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:

  Phone: 0800 555 050
  Fax: 0800 2 SUPPORT (0800 2787 7678)
  Email: advocacy@hdc.org.nz

- You can also contact the central Health and Disability Ethics Committee (HDEC) that approved this study on:

  Phone: 0800 4 ETHICS
  Email: hdecs@moh.govt.nz

Consent Form

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Declaration by participant:

☐ I have read, and I understand the Participant Information Sheet. I have had the opportunity to ask questions and I am satisfied with the answers I have received.

☐ I freely agree to participate in this study.

☐ I have been given a copy of the Participant Information Sheet and Consent Form to keep.

Please provide your email address if you would like a summary of the findings to be sent to you by the end of Feb 2019.

Participant's name: _____

Signature: _____ Date: _____

Email address: _____

Declaration by the member of the research team:

- I have given a verbal explanation of the research project to the participant, and have answered the participant's questions about it.
- I believe that the participant understands the study and has given informed consent to participate.

Name: _____

Signature: _____ Date: _____

APPENDIX C: Focus Group Questions

1. What do you like about MI?

- What is your understanding of… (The item that they have mentioned).

2. What specific things are there about MI that makes it appealing?
3. How is MI of benefit to you?

- What do you dislike about MI?

4. How often do you use MI?

- In what context are you using MI?

5. Is there another way you would like to use MI in your work if you had the opportunity?
6. In what way is MI different to from the usual method(s) you use to increase engagement in treatment?
7. Why is feeling supported as opposed to being told what to do is important for this population?
8. How do you believe that MI promotes engagement in treatment?
9. How has MI impacted on your working relationship with clients?
10. What has been difficult in using MI?

- What constraints or challenges (if any) have emerged when using MI within your work setting?
- How have you overcome this?
- Do the benefits of MI outweigh the challenges?
- What ideas/ suggestions as to how this could be improved?

11. What is your experience of the training you received in MI?

- What else would be of benefit to include in the training to assisting your learning MI?

12. What would enhance your feeling of competency in using MI?

13. Is MI something you would like to continue with in the future?

14. Why/ Why not?

15. Is it feasible to use MI in your current work situation?

16. Why/why not?

APPENDIX D: Information Sheet for Practitioners – Focus Group

School of Health Sciences

Telephone: 03-3693694

Email: sara.soleymani@pg.canterbury.ac.nz

Information Sheet for Practitioners (Focus Group)

My name is Sara Soleymani and I am a Ph.D. thesis student at the University of Canterbury. I am doing my research looking at the effectiveness of Motivational Interviewing (MI) in Intimidate Partner Violence Intervention. The purpose of this research is to investigate the value of MI (a brief pre-intervention method) in enhancing engagement of male perpetrators.

Your involvement in this project will be to participate in a focus group with other practitioners at Aviva and Stopping Violence Services (SVS). These groups will take place in Christchurch. Your participation in this group is entirely voluntary. The purpose of this focus group is to provide an opportunity for practitioners to discuss their view about MI after being trained in it and had the opportunity to utilise it with their clients. The focus group will be recorded by audio-tape to assist with research collection and this tape will be kept in a locked and secure facility. You may review a transcription of this session by contacting the researcher, Sara Soleymani at sara.soleymani@pg.canterbury.ac.nz .

It is not expected that there are any risks involved in the tasks in this research, and focus groups are designed to be brief and non-distressing. However, your participation is voluntary and if at any stage you do feel distressed then you may cease participation immediately. You can take as much time as you need to decide whether to take part. If you decide to participate you have

the right to withdraw from the study at any time without penalty. If you withdraw then any information relating to you will be removed and destroyed.

You may receive a copy of the project results by contacting the researcher at the conclusion of the project.

APPENDIX E: Consent Form for Practitioners – Focus Group

School of Health Sciences

Telephone: 03-3693694

Email: sara.soleymani@pg.canterbury.ac.nz

Consent Form for Practitioners (Focus Group)

I have read and understood the information sheet provided to me and I understand what is required of me if I agree to take part in this research. I have also been given a full explanation of this project and have had the opportunity to ask questions.

I understand that taking part in this study is completely voluntary and that I may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I have provided. I understand that any information or opinions I provide will be kept confidential to the researcher and that any published or reported results will not identify the participants.

I understand that this session will be recorded by audio-recording and that this will be kept in a locked and secure facility. I also understand that I can contact the researcher (Sara Soleymani) should I wish to review the transcription of this session. I understand that all other data collected for the study will be kept in locked and secure facilities and/or in password-protected electronic form and will be destroyed after five years. I understand that I am able to receive a report on the findings of the study by contacting the researcher at the conclusion of the project. I understand that a thesis is a public document and will be available through the UC library.

I understand that I can contact the researcher (Sara Soleymani) for further information. If I have any complaints I can contact the Chair of the University of Canterbury Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

By signing below, I agree to participate in this research project.

Name_____

Date_____

Signature_____

Please return this form to the researcher.

UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

APPENDIX F: Information Sheet and Consent Form for Control Participants

Information Sheet and Consent Form for Control Participants

Study title:	Enhancing Engagement in Intimate Partner Violence Intervention	
Locality:	**SVS/Aviva**	
Lead investigator:	**Sara Soleymani**	Contact phone number: 03-3693694

We are asking if you would like to be part of a study on Enhancing Engagement in Intimate Partner Violence Intervention run by SVS/Aviva. It is your choice to be in the study or not.

- If you don't want to be in the study, you don't have to give a reason, and it won't affect the care you receive at SVS/Aviva.
- If you do want to be in the study, but change your mind later, you can pull out of the study at any time.

The information below will help you decide if you would like to be in the study. It describes why we are doing the study, what you will be asked to do, what the benefits and risks to you might be, and what will happen after the study ends. We will go through this with you and answer any questions you may have. This will take about 5-7 minutes. You may also want to talk about the study with other people, such as families, friends, or healthcare providers. Feel free to do this. An interpreter is also available if you want.

If you agree to be in the study, you will be asked to sign the Consent Form on the last page of this document. You will be given a copy of the Information Sheet to keep.

This document is 5 pages long, including the Consent Form. Please make sure you have all the pages.

Why are we doing the study?

We are interested to know if we can improve attendance at the Intimate Partner Violence Treatment programs at SVS/Aviva by changing what is discussed in the first two meetings

before the program begins. This would involve a partnership way of working and will give you the time and space for you to think about your behaviour and attending the intervention so that you can make the best decision for yourself and your family.

We want to see if this different type of conversation makes a difference to treatment engagement and attendance.
The study is a partnership between SVS/Aviva and the University of Canterbury. If you have any questions about the study, please feel free to contact Sara Soleymani at 03-3693694 or sara.soleymani@pg.canterbury.ac.nz

The study has ethical approval from:

- Central Health and Disability Ethics Committee
- Human Ethics Committee, University of Canterbury.
- Maori Advisory Group, University of Canterbury

What would your being in the study involve?

- Everyone in the study first meets with a SVS/Aviva staff member before the treatment starts.
- You will be asked to participate in the study. If you agree to be part of the study, you will meet with the SVS staff member as they usually do. You will be asked to fill in two brief questionnaires before and after the meetings. This is so that we can have a comparison between what currently happens and the different type of conversation.
- For the questionnaires, you will be asked to mark on a 0-10 scale your thoughts about stopping violence, and your readiness to attend the treatment.
  You will be asked to do this 2 times - at the beginning of the first meeting and at the end of the last meeting. This will take only 2-3 minutes each time.

What are the possible benefits and risks to you of being in the study?

There are not expected to be any risks or discomfort from being in the study. We will ensure that care is provided to everyone who is in the study.

What are my rights if I am in the study?

- It is up to you whether you want to be in the study. You are free to say no to be in the study and you can choose to leave the study at any time without any disadvantage.

- If you agree to be in the study a number will be used on all forms in place of your name. Your name and number will be stored in a different place from the other information we collect as part of the study in a secure office in the School of Health Sciences at the University of Canterbury. You can ask to have any of the information about you collected as part of the study.

What will happen after the study ends, or if you pull out?

- All information collected during the study will be securely stored in a secure office at the University of Canterbury. It will be stored either in a locked filing cabinet (ratings) or in password-protected electronic files (attendance information). The information will be stored for 10 years and then destroyed – questionnaires will be shredded and electronic files deleted.

- The information may be used during that time for further studies.

- The findings of the study may be written up in scientific journals or presented at conferences, but no names or other ways in which you could be identified will be used.

- A summary of the findings will be sent to everyone who agrees to be in the study by the end of June 2019.

Where can you go for more information about the study, or raise concerns or complaints?

- If you have any questions, concerns or complaints about the study at any stage, you can contact:

  Sara Soleymani, Ph.D. Candidate, School of Health Sciences, University of Canterbury
  Phone: 03-3693694
  sara.soleymani@pg.canterbury.ac.nz

- If you want to talk to someone who isn't involved with the study, you can contact an independent health and disability advocate on:

  Phone: 0800 555 050
  Fax: 0800 2 SUPPORT (0800 2787 7678)
  Email: advocacy@hdc.org.nz

- You can also contact the central Health and Disability Ethics Committee (HDEC) that approved this study on:

  Phone: 0800 4 ETHICS
  Email: hdecs@moh.govt.nz

Consent Form

Declaration by participant:

- I have read, or have had read to me in my first language, and I understand the Participant Information Sheet. I have had the opportunity to ask questions and I am satisfied with the answers I have received.
- I freely agree to participate in this study.
- I have been given a copy of the Participant Information Sheet to keep.

Please provide your email address if you would like a summary of the findings to be sent to you by the end of Feb 2019.

Participant's name: _____

Signature: _____ Date: _____

Email address: _____

Declaration by the member of the research team:

- I have given a verbal explanation of the research project to the participant, and have answered the participant's questions about it.
- I believe that the participant understands the study and has given informed consent to participate.

Name: _____

Signature: _____ Date: _____

APPENDIX G: Demographic, Change, and Readiness Questionnaires

Demographic Data Questionnaire

Participant ID: ……

Age: ……

Ethnicity: ……..

Education: ……

Less than High School ☐ High School ☐ College or Technical ☐ University ☐

Income (annually): …….

Relationship Status: ……

Current living Status:

Roommate ☐ Nuclear family ☐ Alone ☐ Couple ☐ Other ☐

Employment Status: Employed ☐ Unemployed ☐

Partner Violence:

Physical ☐ Psychological ☐ Verbal ☐ Sexual ☐

Criminal history of Violence: Yes ☐ NO ☐

Change Questionnaire

Please answer each of the following questions about your current views about stopping violence.

1. It is ***important*** for me to make this change.	0 1 2 3 4 5 6 Definitely Not Probably Not Maybe Probably Definitely
2. I ***could*** make this change.	0 1 2 3 4 5 6 Definitely Not Probably Not Maybe Probably Definitely
3. I am ***trying*** to make this change.	0 1 2 3 4 5 6 Definitely Not Probably Not Maybe Probably Definitely

Please answer the following question about your current views about attending the Intimate Partner Violence Intervention.

I am ready to attend the Intimate Partner Violence Intervention

0	1	2	3	4	5	6	7	8	9	10
Definitely Not		Probably Not			Maybe		Probably		Definitely	

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APPENDIX H: Information Sheet and Consent Form for MI Participants

Information Sheet and Consent Form for MI participants

Study title:	Enhancing Engagement in Intimate Partner Violence Intervention	
Locality:	**SVS/Aviva**	
Lead investigator:	**Sara Soleymani**	Contact phone number: 03-3693694

We are asking if you would like to be part of a study on Enhancing Engagement in Intimate Partner Violence Intervention run by SVS/Aviva. It is your choice to be in the study or not.

- If you don't want to be in the study, you don't have to give a reason, and it won't affect the care you receive at SVS/Aviva.
- If you do want to be in the study, but change your mind later, you can pull out of the study at any time.

The information below will help you decide if you would like to be in the study. It describes why we are doing the study, what you will be asked to do, what the benefits and risks to you might be, and what will happen after the study ends. We will go through this with you and answer any questions you may have. This will take about 5-7 minutes. You may also want to talk about the study with other people, such as families, friends, or healthcare providers. Feel free to do this. An interpreter is also available if you want.

If you agree to be in the study, you will be asked to sign the Consent Form on the last page of this document. You will be given a copy of both this Information Sheet to keep.

This document is 5 pages long, including the Consent Form. Please make sure you have all the pages.

Why are we doing the study?

We are interested to know if we can improve attendance at the Intimate Partner Violence Intervention programs at SVS/Aviva by changing what is discussed in the first two meetings before the program begins. This would involve a partnership way of working and will give you

the time and space for you to think about your behaviour and attending the intervention so that you can make the best decision for yourself and your family.

We want to see if this different type of conversation makes a difference in intervention engagement and attendance.
The study is a partnership between SVS/Aviva and the University of Canterbury. If you have any questions about the study, please feel free to contact Sara Soleymani at 0210308361 or sara.soleymani@pg.canterbury.ac.nz

The study has ethical approval from:

- Central Health and Disability Ethics Committee
- Human Ethics Committee, University of Canterbury.
- Maori Research Advisory Group, University of Canterbury

What would your being in the study involve?

- Everyone in the study first meets with an SVS/Aviva staff member before the intervention starts.
- You will be asked to participate in the study. If you agree to be part of the study, the SVS worker will have these 2 first meetings with you (20-40 minutes each time) described above, which will be audio-recorded. You have the option to opt out of the audio-recordings, but still, be in the study and fill in the questionnaires. You will be asked to complete the two brief questionnaires before and after the meetings.
- For the questionnaires, you will be asked to mark on a 0-10 scale your thoughts about stopping violence, and your readiness to attend the intervention.
  You will be asked to do this 2 times - at the beginning of the first meeting and at the end of the second meeting. This will take only 2-3 minutes each time.

What are the possible benefits and risks to you of being in the study?

There are not expected to be any risks or discomfort from being in the study. We will ensure that care is provided to everyone who is in the study.

What are my rights if I am in the study?

- It is up to you whether you want to be in the study. You are free to say no to be in the study and you can choose to leave the study at any time without any disadvantage.

- If you agree to be in the study a number will be used on all forms and audio-recordings in place of your name. Your name and number will be stored in a different place from the other information we collect as part of the study in a secure office in the School of Health Sciences at the University of Canterbury. You can ask to have any of the information about you collected as part of the study.

What will happen after the study ends, or if you pull out?

- All information collected during the study will be securely stored in a secure office at the University of Canterbury. It will be stored either in a locked filing cabinet (ratings) or in password-protected electronic files (audios and attendance information). The information will be stored for 10 years and then destroyed – questionnaires will be shredded and electronic files deleted.

- The information may be used during that time for further studies.

- The findings of the study may be written up in scientific journals or presented at conferences, but no names or other ways in which you could be identified will be used.

- A summary of the findings will be sent to everyone who agrees to be in the study by the end of June 2019.

Where can you go for more information about the study, or raise concerns or complaints?

- If you have any questions, concerns or complaints about the study at any stage, you can contact:

  Sara Soleymani, Ph.D. Candidate, School of Health Sciences, University of Canterbury
  Phone: 03-3693694
  sara.soleymani@pg.canterbury.ac.nz

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Consent Form

Declaration by participant:

☐ I have read, or have had read to me in my first language, and I understand the Participant Information Sheet. I have had the opportunity to ask questions and I am satisfied with the answers I have received.

☐ I freely agree to participate in this study.

☐ I would like to opt out of the audio-recordings, but still willing to participate in the study and fill in the questionnaires.

☐ I have been given a copy of the Participant Information Sheet and Consent Form to keep.

Please provide your email address if you would like a summary of the findings to be sent to you by the end of Feb 2019.

Participant's name: _____

Signature: _____ Date: _____

Participant's Email Address: _____

Declaration by the member of the research team:

- I have given a verbal explanation of the research project to the participant, and have answered the participant's questions about it.
- I believe that the participant understands the study and has given informed consent to participate.

Name: _____

Signature: _____ Date: _____